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REPORT TO THE
BOARD OF SUPERVISORS
OF THE
CITY AND COUNTY OF SAN FRANCISCO

REVIEW OF THE REPORT OF THE MAYOR'S STADIUM TASK FORCE

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SAN FRANCISCO BOARD OF SUPERVISORS

FEBRUARY, 1984

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BOARD OF SUPERVISORS

BUDGET ANALYST

1182 MARKET STREET, ROOM 422

SAN FRANCISCO, CALIFORNIA 94102 • TELEPHONE (415) 558-2641

February 28, 1984

Honorable Richard Hongisto, Member
Board of Supervisors
Room 235, City Hall
San Francisco, California 94102

Dear Supervisor Hongisto:

Transmitted herewith is the Budget Analyst's report presenting the results of our review of the report of the Mayor's Stadium Task Force. The purpose of this review was to evaluate the study's methodologies, conclusions and recommendation. This included a review of the report of the Mayor's Stadium Task Force issued October 1983 and the major supporting research and data document, the Stadium Feasibility Analysis report, which was prepared by consultants to the Task Force.

The response of the Mayor's Task Force to our report, excluding the Executive Director of the Redevelopment Agency who did not sign this response, begins on page 64. The Task Force referring to our report states, "Our regret is that in its present form the report will be misleading." The Task Force further states "...your report provides no fresh insight that would suggest the Task Force should alter our thinking or recommend to the Board any change in our original conclusions. The best approach now, it would seem, is to respond directly to any questions the Board or individual Supervisors might have -- should you decide to file the report in its current state."

The only specific issue raised in the Task Force's response is that we erred on page five (now page six) of our report by stating that the Task Force recommended construction of a new downtown stadium (which we have modified). The Task Force fails to mention that in the first paragraph of page one of our report we quote the Task Force's recommendation for "... the City to pursue the construction of a new stadium near downtown and to reuse Candlestick Park for some other purpose." As clearly stated in the outset of our report, with which the Task Force does not take exception, this is the recommendation that our staff understood to be the Task Force's recommendation.

Other than this one statement, the Task Force does not respond to any of the issues and inconsistencies which we have raised in our review and analysis of the Stadium Task Force report and the Stadium Feasibility Analysis report. The issues that we raised include the following:

Consultant Study Teams

- The same architectural firms, the same urban planning firm, the same construction consultants and the same cost consultant who performed the study paid for by the San Francisco Giants on "The Future of Candlestick Park" also conducted the subsequent "Stadium Feasibility Study --- A Study of Alternatives," under a contract executed by the Director of City Planning on behalf of the Mayor's Task Force. These consultants were retained by the Mayor's Task Force subsequent to a \$300,000 appropriation, approved by the Mayor and the Board of Supervisors, for the purpose of studying stadium alternatives.

These consultants were, according to the Task Force, unanimously selected after a nationwide search for the most qualified consultants available. As stated in the first paragraph of the Mayor's Task Force Report, the Task Force was directed to evaluate the issues raised by the Giants. This introductory paragraph reads as follows:

"Early in 1982, the San Francisco Giants' published a report entitled, "The Future of Candlestick Park," and submitted it to the Mayor for the City's consideration. In response, Mayor Feinstein appointed a Task Force to evaluate the issues raised by the Giants concerning the stadium. The Task Force consisted of six City Departments represented by the following individuals:

Dean Macris, Director of City Planning, Chair
Jeffrey Lee, Director of Public Works
Wallace Wortman, Director of Real Estate
Robert Kenealey, Assistant City Attorney
Thomas Malloy, General Manager of Recreation and Park
Wilbur Hamilton, Executive Director, Redevelopment Agency"

- Therefore, the Mayor's Task Force evaluated the issues raised by the Giants through the use of data and analyses performed by some of the same consultants that had served the Giants in developing the "Future of Candlestick Park" report.

Assumptions

- The basic assumptions used in the Stadium Feasibility Analyses report were not stated at the outset nor applied consistently in each analysis.

Candlestick Park's Problems

- The Task Force found that "... the results of the consultant's study show that Candlestick Park is in substantial disrepair . . ." However, the consultant's report does not identify or discuss any damage or deterioration and does not include any estimate of required repair costs.


- A portion of a \$200,000 concrete repair project, that was authorized by the Board of Supervisors, was instead used to investigate key structural and architectural elements at Candlestick. DPW found several problems affecting public safety, such that the estimated cost to renovate Candlestick may be underestimated by as much as \$5 million.
- Deferring maintenance to Candlestick Park may have resulted, in part, in the need for such significant repairs.

Downtown Site Selection Issues

- Four sites were within a "site zone" designated by the Task Force that generally comprised the China Basin/Mission Bay project area and were selected for detailed analysis. Site 8, one highly ranked site, may have been prematurely excluded from such detailed evaluation.

Transportation Impacts

- Transportation access, traffic, transit and parking are problems for Candlestick Park area residents, users and the teams. A 1981 DPW study, adopted for implementation by the Board of Supervisors, estimated costs for a long-range transportation solution for Candlestick Park at approximately \$32 million. To date, no funds have been appropriated for this purpose.
- These costs were inflated to \$43 million in the Stadium Feasibility Analysis (an increase of 34% over a two-year period) and costs for alternative developments at Candlestick Park range in cost from \$4 million to \$50 million. These estimates significantly increase the costs of any Candlestick Park alternatives since transportation costs associated with the downtown locations only range from an estimate of \$185,000 to less than \$6 million.
- The Stadium Feasibility Analysis consultants and the Task Force report differ considerably in their transportation improvement cost estimates. Costs for patron parking and increased levels of public transit operations are not included in any of the downtown stadium analyses and downtown transportation improvement costs. Downtown transportation costs included by the transportation consultants were not factored into the Stadium Feasibility Analysis cost consultants' assumptions.
- The consultants relied on origin and destination data over ten to fifteen years old to reflect current conditions at Candlestick. The consultants inaccurately stated that baseball attendance is primarily from San Francisco, although the data clearly showed that approximately one-third of Candlestick's baseball patrons and about one-fourth of Candlestick's football patrons are from San Francisco.



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- Only five Candlestick Park development alternatives of the eight alternatives identified were evaluated for transportation impacts. Some of the assumptions used to define these alternatives varied, raising questions about whether these alternatives were evaluated correctly. In addition, while a deficit parking supply is likely to occur, none of the alternatives included adequate parking facilities to meet this demand.
- No on-site patron parking is planned for a downtown stadium. Instead, the consultants and the Task Force assume that patrons will park in public and private parking spaces within a one-mile or 20-minute walking distance of the stadium.
- The consultants selected one final downtown site (Site 14, Northeast Mission Bay) for their analysis. This site had higher transportation access rankings and lower transportation improvement costs, resulting in more favorable overall transportation impacts than should be expected at the other downtown sites.
- Not analyzed for transportation impacts were such events as an average-attended baseball game (likely the most frequent stadium event), or the "worst case" opening day baseball game or Monday night football games that would conflict with peak downtown transportation and parking needs. The transportation consultants assumed that no major weekday events would occur, although the cost consultants base their operating revenue projections on the ability to schedule over 200 event days, based on a 365-day year.
- A distribution model, used by the transportation consultants to predict the origins of downtown stadium attendees, has a low level of accuracy that does not support the consultants' conclusions.
- Downtown stadium patrons' use of public transit is projected to "represent a 50 percent increase over Candlestick Park," resulting in an average total use of transit by 30 percent of all attendees. These estimates appear overly optimistic. The Oakland Coliseum, even with its direct BART connection, only achieves an average of 19 percent transit patronage.
- It is assumed that a downtown stadium can take advantage of the transportation improvements to be financed through the Caltrans I-280 Transfer Program, although none of the Caltrans alternatives consider the possibility of a downtown stadium, and in fact, many of these alternatives conflict with the proposed stadium sites in their use of this property for freeway touchdown ramps, connectors, rights-of-way and Muni Metro and Southern Pacific rail extensions.

Financing and Economic Impacts

- Neither the Stadium Feasibility report nor the Task Force report addresses the impact of pending Federal and State legislation that would limit the issuance of lease revenue bonds to finance stadium renovation or new construction.
- The Stadium Feasibility Analysis report does not present a complete analysis of all four alternatives relating to doming Candlestick or building a new stadium at Candlestick.
- The Stadium Feasibility Analysis study team assumed that office space development at the Candlestick location was not viable. However, we found some disagreement among local real estate experts regarding this assumption.
- The Stadium Feasibility Analysis report does not discuss the potential reduction in costs associated with the demolition of Candlestick and construction of a new stadium over the existing foundation.
- The Stadium Feasibility Analysis report does not present a total project cost for either renovating/doming Candlestick or building a new stadium on that site.
- The construction cost consultants acknowledge that their presentation in the Stadium Feasibility Analysis report was in error in one section of their report when they stated that hard construction costs associated with both the renovation of the existing Candlestick facility and the building of a new stadium at the Candlestick location were identical.
- The Task Force has underestimated the costs of renovating and doming Candlestick by approximately \$13.6 million.
- The Task Force estimates the total project cost of renovating and doming Candlestick to be \$135.3 million (before capital offsets) and the project cost of building a downtown stadium (before capital offsets) to be \$227.4 million. Therefore, the Task Force estimates that renovation of Candlestick would cost \$92.1 million less than building a new downtown stadium.
- The market value of Candlestick Park may be substantially higher than originally estimated. The tentative offer for Candlestick Park (reportedly \$40 million) is substantially higher than that amount estimated by the consultants (i.e., \$13.5 million).

- With regard to a downtown stadium, the Stadium Feasibility Analysis' construction cost estimates do not represent total project costs. Excluded are traffic and transportation improvements, scoreboard costs, and some potential capital offsets. While the Task Force's estimated project costs include these items, it assumes that all deposits from the lease of luxury suites and loge seats will be used as capital offsets against the cost of constructing the new stadium, although a portion of these revenues may have to be shared with the sports franchises.
- The Task Force operating revenue projections for a downtown stadium are based on best-case attendance levels, and assume that the Golden State Warriors will be a major long-term tenant although no such commitment has been made by that franchise.
- The Task Force operating projections do not include conversion costs at the downtown stadium (i.e., the costs of converting stadium facilities from one event configuration to another).
- Economic impact projections in the Stadium Feasibility Analysis report are based on some assumptions that are either inconsistent with the rest of the report (e.g. 4.93% vs. 7% inflation rate) or otherwise questionable.
- An operating projection report submitted by Bear Stearns Funding, Inc. (after completion of the Stadium Feasibility Analysis and the Task Force reports) concludes that normal annual operating revenues at a downtown stadium (without the Golden State Warriors as tenants) would cover all costs except \$1.7 million of yearly bond debt service. In determining the size of the project bond issue, the Bear Stearns model assumes adequate capital offsets will be provided from private sources to cover the City's short-term construction loans and thus reduce the size of the City's long-term bonds. The model excludes probable transportation improvement costs associated with developing Candlestick Park for alternative uses (which would affect the related bond debt service requirements), and assumes that plans to commence a downtown stadium will begin in June 1984. Furthermore, it is not clear that conversion costs are accounted for in the operating cost projections used in the Bear Stearns model.

Honorable Richard Hongisto, Member
Board of Supervisors
February 28, 1984
Page 7

Based on these findings, the Budget Analyst concludes that the information and conclusions presented in the Task Force report and in the Stadium Feasibility Analysis report are not sufficient to point out a clear course of action with regard to refurbishing and doming Candlestick Park, building a new domed stadium on the Candlestick site, or building a new downtown domed stadium. Rather, our review finds that there are numerous significant issues which have not yet been addressed and that need to be answered before a decision can be made. We believe that these issues should be addressed and resolved in order to provide the Board of Supervisors with additional facts to assist them in their final decision on the stadium issue.

Respectfully submitted,



Harvey M. Rose
Budget Analyst

cc: President Nelder
Supervisor Britt
Supervisor Kennedy
Supervisor Kopp
Supervisor Maher
Supervisor Molinari
Supervisor Renne
Supervisor Silver
Supervisor Walker
Supervisor Ward
Clerk of the Board
Mayor Feinstein
Jim Lazarus
Dean Macris
Jeffrey Lee
Wallace Wortman
Robert Kenealey
Thomas Malloy
Wilbur Hamilton
John Farrell
Dave Kroopnick

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY	i
-------------------------	---

SECTION I:	INTRODUCTION	
	Giants Study on the Future of Candlestick	2
	Stadium Feasibility Analysis	3
	Other Reference Sources	4
	Report Guide	5

SECTION II:	CANDLESTICK: WHAT IS THE PROBLEM?	
	Stadium Feasibility Analysis Study Findings	6
	Giants Study Findings	6
	Structural and Architectural Study Findings	6
	Analyses	7
	Why Such Extensive Damage?	8
	Conclusion	11

SECTION III:	DOWNTOWN: SITE SELECTION ISSUES	
	Background	12
	Site Zone	14
	Favored Sites	15
	Conclusion	16

SECTION IV:	CANDLESTICK ALTERNATIVES: TRANSPORTATION IMPACTS	
	Background	17
	Legislation	18
	Evaluation of Alternatives	18
	Existing Conditions	20
	Future Conditions	21
	Costs	23
	Conclusions	23

SECTION V:	DOWNTOWN STADIUM: TRANSPORTATION IMPACTS	
	Background	25
	Evaluation of Alternatives	25
	Analyses	25
	Costs	30
	Conclusions	32

SECTION VI:	CANDLESTICK ALTERNATIVES: FINANCING AND ECONOMIC IMPACTS	
	Background	34
	Development Schemes and Construction Costs	35
	Economic Impacts	39
	Conclusions	40

SECTION VII: DOWNTOWN STADIUM: FINANCING AND ECONOMIC IMPACTS

Development Schemes and Construction Costs	42
Income from Operations.....	45
Economic Impacts.....	49
Conclusions	51

APPENDICES

Appendix 1: Consultant Study Teams.....	52
Appendix 2: Major Reference Materials	53
Appendix 3: Persons Contacted	55
Appendix 4: Status of Park and Recreation Appropriation (Ordinance No. 201-82).....	58
Appendix 5: Estimated Costs for Repairs at Candlestick.....	59
Appendix 6: Alternative Stadium Sites	60
Appendix 7: Candlestick Park Access Improvements (1970-75).....	61
Appendix 8: Downtown Stadium Project Cost (Site 7).....	62

WRITTEN RESPONSE TO THE REPORT FROM THE TASK FORCE	64
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EXECUTIVE SUMMARY

Pursuant to a request by the San Francisco Board of Supervisors, the Budget Analyst conducted a review of the report of the Mayor's Stadium Task Force, including an evaluation of the study's methodology and conclusions and an examination of the proposed demolition of Candlestick Park and the construction of a domed, multi-purpose stadium at China Basin. The Stadium Task Force report, entitled "Stadium Feasibility Analysis: Task Force Report to the Mayor," was issued in October, 1983, and contains the Task Force conclusions and one recommendation to the Mayor. The recommendation is for ". . . the City to pursue the construction of a new stadium near downtown and to reuse Candlestick Park for some other purpose."

This recommendation was developed by the Task Force based on their review of the availability of downtown sites and private financing, after directing a team of consultants to evaluate data on real estate, urban design, architecture, engineering, construction costs, traffic, transportation, parking, economics, finance, and legal and public opinions. Funding for the consultants' report, entitled "Stadium Feasibility Analysis--- A Study of Alternatives," was authorized by the San Francisco Board of Supervisors, with an appropriation of \$300,000 from the Candlestick Park Fund in December, 1982. The Budget Analyst's review also included a detailed review of the assumptions, methodologies and conclusions contained in this feasibility study.

The major areas of concern addressed by the Stadium Feasibility Analysis consultants and the Task Force included the potential for continued uses at Candlestick Park, the location and construction of a new downtown stadium, and the transportation, financial and economic impacts of Candlestick and downtown stadium facility alternatives. These issues are examined and discussed in greater detail in the following sections of this report.

A summary of our findings is presented below.

Consultant Study Teams

- The same architectural firms, the same urban planning firm, the same construction consultants and the same cost consultant who performed the study paid for by the San Francisco Giants on "The Future of Candlestick Park" also conducted the subsequent "Stadium Feasibility Study --- A Study of Alternatives," under a contract executed by the Director of City Planning on behalf of the Mayor's Task Force. These consultants were retained by the Mayor's Task Force subsequent to a \$300,000 appropriation, approved by the Mayor and the Board of Supervisors, for the purpose of studying stadium alternatives. The Task Force reports that these same consultants were selected based on an extensive RFP process. Of the 107 RFPs mailed, the Task Force received 13 complete proposals, involving 73 consultants. The Task Force interviewed five of the 13 consultant teams and unanimously selected what they believed to be the best Study Team.

The introductory paragraph of the report of the Mayor's Stadium Task Force reads as follows:

"Early in 1982, the San Francisco Giants' published a report entitled, "The Future of Candlestick Park," and submitted it to the Mayor for the City's consideration. In response, Mayor Feinstein appointed a Task Force to

evaluate the issues raised by the Giants concerning the stadium. The Task Force consisted of six City Departments represented by the following individuals:

Dean Macris, Director of City Planning, Chair
Jeffrey Lee, Director of Public Works
Wallace Wortman, Director of Real Estate
Robert Kenealey, Assistant City Attorney
Thomas Malloy, General Manager, Recreation and Park
Wilbur Hamilton, Executive Director, Redevelopment Agency"

- Therefore, the Task Force evaluated the issues raised by the Giants through the use of data and analyses performed by some of the same consultants that had previously served the San Francisco Giants.
- The earlier Giants report "proceeds from the universally-accepted premise that Candlestick Park is, at present an unacceptable sports facility for San Francisco" and examines: 1) doming Candlestick, with which several problems are associated, and 2) building a new downtown stadium, with which no adverse impacts are associated. The conclusions reached by this similar Stadium Feasibility Analysis study consultant team, which were summarized in the Task Force report, also favor pursuing the construction of a downtown stadium.

Assumptions

The basic assumptions used in the Stadium Feasibility Analyses report were not stated at the outset nor applied consistently in each analysis. Three examples of the problems this created are as follows:

- Items such as luxury boxes were included in the Candlestick Park Stadium refurbishment plan that may not be economically feasible.
- The study team assumed that a new Candlestick Park Stadium would have to be constructed in the existing parking lot which would cause seemingly insurmountable construction cost and parking problems at Candlestick Park.
- The cost assumptions for a large, frequently used, multi-purpose downtown stadium do not seem to coincide with the transportation consultants' assumptions that no major weekday events would occur at a downtown stadium.

It should be noted that initially the Stadium Feasibility Analysis work program included only an analysis of a downtown domed stadium. The Task Force included an examination of other alternatives, such as the doming of Candlestick, only after legislation was amended by the Board of Supervisors.

Candlestick Park's Problems

- The Stadium Task Force found that ". . . the results of the consultant's study show that Candlestick Park is in substantial disrepair . . ." However, the Stadium Feasibility Analysis does not identify or discuss any damage or deterioration and does not include any estimate of required repair costs, focusing instead on the need to dome Candlestick and to add enhancements to

the facility. The earlier Giants' study also does not identify or estimate costs for repairing Candlestick, although it too states that "general deterioration of the structure has occurred and has gone unchecked."

- We found that a portion of a \$200,000 concrete repair project, funded as part of a supplemental appropriation of over \$1.3 million that was authorized by the Board of Supervisors, was instead used to fund a study to investigate specific key structural and architectural elements at the stadium. The Department of Public Works (DPW) found several problems affecting public safety that needed repair. The estimated cost to renovate Candlestick may be underestimated by as much as \$5 million because of these identified repairs.
- If Candlestick is domed, some of these repairs may not be necessary. Alternatively, other repairs may be needed, since the DPW study examined only a portion of the stadium structure. Deferring maintenance to Candlestick Park may have resulted, in part, in the need for such significant repairs.

Downtown Site Selection Issues

- The consultant's review of fourteen potential locations for a downtown stadium resulted in a ranking based on acquisition cost, assembly time, public acceptance, policy conflict and access. Four sites were within a "site zone" designated by the Task Force that generally comprised the China Basin/Mission Bay project area and were selected for detailed analysis. Site 8, one highly ranked site, may have been prematurely excluded from such detailed evaluation.

Transportation Impacts

In our analysis of the transportation impacts at Candlestick Park and downtown we found the following:

- Transportation access, traffic, transit and parking are frequently cited as problems for Candlestick Park area residents, users and the teams. A 1981 Department of Public Works study, adopted for implementation by the Board of Supervisors, estimated costs for a long-range solution to transportation problems at Candlestick Park at approximately \$32 million. To date, no work has been completed on these improvements.
- These costs were inflated to \$43 million in the Stadium Feasibility Analysis (an increase of 34% over a two-year period). Of this sum, the Task Force estimates that over \$18 million would be paid by other sources (State and Federal subventions), resulting in a net cost to the City of approximately \$25 million. Transportation improvement costs for alternative developments at Candlestick Park also ranged in costs from \$4 million to \$50 million. These estimates significantly increase the costs of any Candlestick Park alternatives since transportation costs associated with the downtown locations only range from an estimate of \$185,000 to less than \$6 million.
- The Stadium Feasibility Analysis consultants and the Task Force report differ considerably in their transportation improvement cost estimates, since the consultants report that bus loading and bus parking space should be major downtown stadium concerns, whereas the Task Force does not include these

items in their projections. Furthermore, these downtown transportation costs, included by the transportation consultants, were not factored into the other Stadium Feasibility Analysis cost consultants' assumptions. Costs for patron parking and increased levels of public transit operations are also not included in any of downtown stadium analyses.

- The Stadium Feasibility Analysis relied on origin and destination data from surveys over ten to fifteen years old to reflect current conditions at Candlestick. More recent football ticket purchase data indicate a downward shift in the San Francisco and Peninsula patronage and a slight increase in the East and North Bay patronage. This finding is aggravated by the fact that the consultants inaccurately stated that baseball attendance is primarily from San Francisco, although our review of their data clearly showed that approximately one-third of Candlestick's baseball patrons and only about one-fourth of Candlestick's football patrons are from San Francisco.
- In the Stadium Feasibility Analysis report only five of the eight development alternatives identified for Candlestick Park were evaluated for transportation impacts. Some of the assumptions used to define these alternatives varied, which raises questions about whether these alternatives were evaluated correctly in each analysis. In addition, while there are currently enough parking spaces to accommodate capacity Candlestick football crowds, a deficit parking supply is likely to occur in the future. However, none of the proposed alternatives for Candlestick Park included the addition of adequate parking facilities to meet this demand, thus resulting in insufficient parking in all cases.
- Although parking is considered one of the biggest problems at Candlestick Park, no on-site patron parking is planned for a downtown stadium. Instead, the consultants and the Task Force assume that patrons will be able to park in public and private parking spaces within a one-mile or 20-minute walking distance of the stadium. Sunday and weeknight parking availability were projected, although projections of weekday stadium events needs for parking were not included.
- With regard to a downtown stadium, the transportation impacts were based on only three of the 14 proposed downtown sites. The consultants then assumed that "there are very few differences in the transportation implications for each of the (three downtown) sites" and thus based all their conclusions on a detailed analysis of only one site (14, Northeast Mission Bay). This site had higher transportation access rankings and lower transportation improvement costs, resulting in more favorable overall transportation impacts, than should be expected at the other downtown sites.
- Not analyzed for transportation impacts were such events as an average-attended baseball game (likely the most frequent stadium event), or the "worst case" opening day baseball game or Monday night football games that would conflict with peak downtown transportation and parking needs. The transportation consultants assumed that no major weekday events would occur, although the cost consultants base their operating revenue projections on the ability to schedule over 200 event days, based on a 365-day year. In response to our request, DPW reports that an 8,000-10,000 attendance level could be accommodated at a daytime downtown stadium event, if the event ended at or before 3:30 p.m.

- A distribution model, used by the transportation consultants to predict the origins of downtown stadium attendees, has a level of accuracy that does not support the consultants' conclusions. Some of the consultants' conclusions based on the results of this model are that San Francisco's football attendance would increase 5-8%, baseball attendance would increase 4% and public transit usage would increase 50% over current conditions at Candlestick. However, this would result in average transit use by 30% of all downtown stadium patrons, significantly higher than the experience of the Oakland Coliseum which achieves an average transit utilization of only 19% even with a direct BART connection.
- It is assumed that a downtown stadium can take advantage of the transportation improvements to be financed through the Caltrans I-280 Transfer Program, although none of the Caltrans alternatives consider the possibility of a downtown stadium, and in fact, many of these alternatives conflict with the proposed stadium sites in their use of this property for freeway touchdown ramps, connectors, rights-of-way and Muni Metro and Southern Pacific rail extensions.

Financing and Economic Impacts

In our analysis of the financial and economic impact aspects of renovating/doming Candlestick, constructing a new stadium at that site or constructing a new domed downtown stadium we found the following:

- The Stadium Feasibility Analysis report does not present a complete analysis of all four of the identified alternatives relating to either doming Candlestick or building a new stadium at the Candlestick location.
- The Stadium Feasibility Analysis study team assumed that office space development at the Candlestick location was not considered viable because the consultants believed that the current overabundance of available office space would reduce the potential benefits of such development at Candlestick. However, we found some disagreement among local real estate experts regarding this assumption.
- The Stadium Feasibility Analysis report does not discuss the potential reduction in costs associated with the demolition of Candlestick and construction of a new stadium over the existing foundation.
- The Stadium Feasibility Analysis report does not present a total project cost for either renovating/doming Candlestick or building a new stadium on that site.
- The construction cost consultants acknowledge that their presentation was in error in one section of their report when they stated that hard construction costs associated with both the renovation of the existing Candlestick facility and the building of a new stadium at the Candlestick location were identical.
- The Task Force has underestimated the costs of renovating and doming Candlestick by approximately \$13.6 million.

- The Task Force estimates the total project cost of renovating and doming Candlestick to be \$135.3 million (before capital offsets) and the project cost of building a downtown stadium (before capital offsets) to be \$227.4 million. Therefore, the Task Force estimates the total project cost of renovating and doming Candlestick (before capital offsets) to be approximately \$92.1 million less than the project cost of building a new downtown stadium.
- The market value of Candlestick Park may be substantially higher than originally estimated. The tentative offer for Candlestick (reportedly \$40 million) is substantially higher than that amount estimated by the consultants (i.e. \$13.5 million).
- With regard to a downtown stadium, the Stadium Feasibility Analysis' construction cost estimates do not represent total project costs. Excluded are traffic and transportation improvements, scoreboard costs, and some potential capital offsets. While the Task Force's estimated project cost includes these items, it assumes that all deposits from the lease of luxury suites and loge seats will be used as capital offsets against the cost of constructing the new stadium, although a portion of these revenues may have to be shared with the sports franchises.
- The Task Force operating revenue projections for a downtown stadium are based on best-case attendance levels, and assume that the Golden State Warriors will be a major long-term tenant although no such commitment has been made by that franchise.
- The Task Force operating projections do not include conversion costs at the downtown stadium (i.e., the costs of converting stadium facilities from one event configuration to another).
- Economic impact projections in the Stadium Feasibility Analysis report are based on some assumptions that are either inconsistent with the rest of the report (e.g. 4.93% vs. 7% inflation rate) or otherwise questionable.
- An operating projection report submitted by Bear Stearns Funding, Inc. (after completion of the Stadium Feasibility Analysis and the Task Force reports) concludes that normal annual operating revenues at a downtown stadium (without the Golden State Warriors as tenants) would cover all costs except \$1.7 million of yearly bond debt service on the project. In determining the size of the project bond issue, the Bear Stearns model assumes adequate capital offsets will be provided from private sources to cover the City's short-term construction loans. These short-term loans will reduce the size of the City's long-term bonds. The model excludes probable traffic and transportation improvement costs associated with developing Candlestick Park for alternative uses (and ultimately the related bond debt service requirements), and assumes that plans to commence a downtown stadium will begin in June 1984. Furthermore, it is not clear from the report that conversion costs are accounted for in the operating cost projections.

Based on these findings, the Budget Analyst concludes that the information and conclusions presented in the Task Force report and in the Stadium Feasibility Analysis report are not sufficient to point out a clear course of action with regard to refurbishing and doming Candlestick Park, building a new stadium on the Candlestick site, or building a new downtown domed stadium. Rather, our review finds that there are numerous significant issues which have not yet been addressed that need to be answered before a decision can be made. We believe that these issues should be addressed and resolved in order to provide the Board of Supervisors with additional facts to assist them in their final decision on the stadium issue.

SECTION I: INTRODUCTION

Pursuant to a request by the San Francisco Board of Supervisors, we have conducted a review of the report¹ of the Mayor's Stadium Task Force. Our review included an evaluation of the study's methodology and conclusions and an examination of the proposed demolition of Candlestick Park and the construction of a domed, multi-purpose stadium at China Basin. The report of the Mayor's Stadium Task Force, issued in October, 1983, contains the Task Force's² conclusions and one recommendation to the Mayor. This recommendation is for ". . . the City to pursue the construction of a new stadium near downtown and to reuse Candlestick Park for some other purpose."

The recommendation was developed by the Task Force based on their review of the availability of specific downtown sites and the possibility of private financing, after directing a team of consultants to evaluate data on real estate, urban design, architecture, engineering, construction costs, traffic, transportation, parking, economics, finance, and legal and public opinions. Funding for the consultants' report, entitled "Stadium Feasibility Analysis---A Study of Alternatives,"³ was authorized by the San Francisco Board of Supervisors, with an appropriation of \$300,000 from the Candlestick Park Fund in December, 1982. Our analysis included a detailed review of assumptions, methodologies and conclusions contained in this feasibility study.

The major areas of concern addressed by the Stadium Feasibility Analysis consultants and the Task Force included the potential for continued uses at Candlestick Park, the location and construction of a new downtown stadium, and the transportation, financial and economic impacts of Candlestick and downtown stadium facility alternatives. Specific issues surrounding each of these major areas are identified and discussed in the following sections of this report.

Our review of these reports and our discussions with the consultants and the Task Force finds that a tremendous amount of work and energy has been expended on this Stadium issue. However, the specific consultant's work on the Stadium Feasibility Analysis study was conducted within a three month time period. Due to this limited schedule, there was insufficient time to undertake major new data collection efforts, particularly for Candlestick Park. Therefore, the consultants relied upon previously accumulated and compiled data sources and information.

¹Stadium Task Force, "Stadium Feasibility Analysis: Task Force Report to the Mayor," October, 1983.

²The Task Force is composed of the following members:

Dean Macris, Director of City Planning, Chair
Jeffrey Lee, Director of Public Works
Wallace Wortman, Director of Real Estate
Robert Kenealey, Assistant City Attorney
Thomas Malloy, General Manager, Recreation and Park
Wilbur Hamilton, Executive Director, Redevelopment Agency
Robert Reeves, employed by the City Planning Department, served as the Task Force Coordinator.

³Crosby Thornton Marshall Associates et. al., "Stadium Feasibility Analysis: A Study of Alternatives for the City of San Francisco, CA." (Volume I: Research and Data). Undated.

In some cases, such as for the traffic origin and distribution data, the information may have been outdated. In other cases, the reference materials were more current. For example a major reference source was the study commissioned by the San Francisco Giants on "The Future of Candlestick Park" released in March, 1982.

Giants Study on the Future of Candlestick

As stated in the cover letter of the Giants report, "this report proceeds from the universally-accepted premise that Candlestick Park is, at present, an unacceptable sports facility for San Francisco. It must be substantially changed, or it must be replaced. The report then examines the principal alternatives available to this community for solving this problem."¹ The two basic alternatives that were examined are doming Candlestick Park and building a new downtown stadium.

In the doming of Candlestick Park alternative, the Giants Report Summary states that there would still remain the critical problems of access, parking and public transit. In the downtown stadium alternative, the Report Summary states that there would be increased benefits for the Hunter's Point community, there are greater public transit opportunities, and such a stadium would stimulate the development of small businesses, the utilization by tourists, and the overall revitalization of the area south of Market Street. Although the Giants' report does not "take a position at this time as to which option ought to be selected," the Report Summary does not identify any adverse impacts that might result from such a downtown facility.

Although the Stadium Feasibility Analysis was "not intended to make recommendations, state preferences or profer (sic) opinions,"² the conclusions reached by the Feasibility study consultant team, which were then summarized in the Task Force report, also favor the construction of a south of Market downtown stadium. As detailed in Appendix I, the same architectural firms, the same urban planning firm, the same construction consultants, and the same cost consultant who performed the earlier study paid for by the San Francisco Giants, also conducted the subsequent "Stadium Feasibility Study---A Study of Alternatives," under a contract executed by the Director of City Planning on behalf of the Mayor's Task Force after a \$300,000 appropriation was approved by the Mayor and the Board of Supervisors.

The Task Force reports that these same consultants were selected based on an extensive Request For Proposal (RFP) process. We have verified that of the 107 RFPs mailed out, the Task Force received 13 complete proposals, involving a total of 73 consultants. The Task Force then interviewed five of the 13 consultant teams and reached their unanimous decision to select what they believed to be the best stadium Study Team possible.

As stated in the first paragraph of the Mayor's Task Force Report, the Task Force was directed to evaluate the issues raised by the Giants. This introductory paragraph reads as follows:

¹Bob Lurie, President of the Giants, letter to the Honorable Dianne Feinstein, dated March 26, 1982.

²Crosby Thornton Marshall Associates, et.al." Stadium Feasibility Analysis: A Study of Alternatives for the City of San Francisco, CA." (Volume I: Research and Data). Undated. Page I.

"Early in 1982, the San Francisco Giants published a report entitled, "The Future of Candlestick Park," and submitted it to the Mayor for the City's consideration. In response, Mayor Feinstein appointed a Task Force to evaluate the issues raised by the Giants concerning the stadium. The Task Force consisted of six City Departments represented by the following individuals:

Dean Macris, Director of City Planning, Chair
Jeffrey Lee, Director of Public Works
Wallace Wortman, Director of Real Estate
Robert Kenealey, Assistant City Attorney
Thomas Malloy, General Manager of Recreation and Park
Wilbur Hamilton, Executive Director, Redevelopment Agency"

Therefore, the Mayor's Task Force evaluated the issues raised by the Giants through the use of data and analyses performed by some of the same consultants that had served the Giants in developing the "Future of Candlestick Park" report.

Stadium Feasibility Analysis

One of the major difficulties with the Stadium Feasibility Analysis report is that a listing of the basic assumptions to be used in the analyses were not stated at the outset, nor were such assumptions applied consistently in each analysis. For example, with regard to the refurbishing of Candlestick (i.e. doming and upgrading the existing stadium) the study team assumed that it would be necessary to incur any expense to "... bring this facility, as closely as possible, up to the standards of a new, contemporary facility." As a consequence, many items were included in the refurbishment plan that may not be economically feasible from a cost/benefit standpoint. Luxury boxes were included in the cost estimates, for example, even though the consultants had concluded that the marketability of such suites would be significantly less than at a downtown facility. The study team did not consider, as an option, the analysis of a least cost solution to the prevailing problems. Such a least-cost solution would have included the doming of the existing facility, and correction of problems caused by deferred maintenance, instead of attempting to make the stadium comparable to a "new, contemporary facility".

In discussions with the Task Force we found that the Giants' management has stated that they will not sign a new long-term lease on Candlestick Park unless major problems of stadium design, access, parking and weather are addressed. The current lease expires in 1994.

It should also be noted that when legislation that would fund the Stadium Feasibility Analysis study first came before the Board of Supervisors, the proposed work program included only an evaluation and analysis of a downtown domed stadium. The Task Force included an examination of other alternatives, such as the doming of Candlestick, only after the legislation was amended by the Board of Supervisors. Nevertheless, the Stadium Feasibility Analysis did not consider any stadium alternatives at Candlestick Park which did not include a dome. Thus, even the least costly Candlestick alternative exceeds \$50 million. The Board of Supervisors has not adopted a policy statement as to the need for a dome nor has the cost effectiveness of such a dome been established.

The Stadium Feasibility Analysis thus considered building a new domed facility at the Candlestick Park location. Although the report acknowledged that this approach would have the lowest cost attendant to land acquisition and relocation, it failed to point out that the construction schedule could be accelerated by as much as two years. The

study team also assumed that a new stadium would have to be constructed in the existing parking lot while Candlestick continued to operate. This resulted in two seemingly insurmountable problems: (1) that site preparation and foundation work would be much more expensive because the parking lot was built on bay mud (while the existing structure at Candlestick is founded on rock and/or firm soils); and (2) that neither sports franchise would be willing to operate without up to half of their existing parking capacity. Not considered by the study team was the option of building a new stadium on the site of the existing facility because it would disrupt the operation of Candlestick and result in the breaking of the City's leases with the teams. Because this alternative was dismissed early in the project, we cannot assess the engineering and architectural aspects of building a stadium that could utilize the existing site preparation and foundation work (rock and/or firm soils).

Other inconsistent uses of assumptions involve transportation issues. In the Stadium Feasibility Analysis and the Task Force report, the transportation consultants assume no major weekday events will occur. The cost assumptions are based on the use of a multi-purpose downtown facility for over 200 event days out of 365 days each year. Several approximate downtown locations were also assumed to be equal with regard to needed transportation and parking improvements. This simplifying assumption, coupled with varying transportation improvement costs that were not included in each of the reports, favored a downtown location. By contrast, transportation problems associated with Candlestick Park are well known and the costs of resolving these problems, after twenty years of operation of the facility, have been enumerated in detail in a Department of Public Works study.

Other Reference Sources

One of the other major reference sources used in the Stadium Feasibility Analysis study was a "Report on Candlestick Park Access" prepared by the San Francisco Department of Public Works in October, 1981. Based on the results on this report, the San Francisco Board of Supervisors adopted Resolution 1012-81 on December 8, 1981, in support of Long-Range Alternative VII, to improve access to and from Candlestick Park, at an estimated cost of \$31.9 million. The data from this DPW report were thus also examined, with respect to its relevancy to this study. Discussions of these issues are contained in the section on the transportation impacts at Candlestick Park and in the section on the transportation impacts predicted to occur at a downtown stadium.

A listing of the other major reference materials used in this review are contained in Appendix 2. Much of our research and information also focused on interviews with those persons who have been involved with Candlestick Park, the proposed new stadium, or related issues surrounding these proposals. A listing of the persons contacted by the Budget Analyst's Office during this review is included in Appendix 3.

While we have attempted to stay current with all existing activity regarding this issue, it has been apparent to us that new developments have occurred since the Stadium Feasibility Analysis report and the Task Force report were issued and have been occurring since we began this analysis. These developments, such as proposed offers for Candlestick land, new financial assumptions and projections, and negotiations with downtown interests could, when made public, significantly alter the conclusions of this report, the original Stadium Feasibility Analysis, and the Stadium Task Force's report.

Report Guide

This report is organized into seven sections. This first section provides a brief introduction and background on the Stadium Task Force Report. Sections II to VII contain our analysis, findings and conclusions, organized as follows:

Section II	Candlestick: What is the Problem?
Section III	Downtown: Site Selection Issues
Section IV	Candlestick Alternatives: Transportation Impacts
Section V	Downtown Stadium: Transportation Impacts
Section VI	Candlestick Alternatives: Financing and Economic Impacts
Section VII	Downtown Stadium: Financing and Economic Impacts

The Appendices include detailed and supporting documentation for the report.

SECTION II: CANDLESTICK: WHAT IS THE PROBLEM?

The first conclusion drawn by the Stadium Task Force, which led to the recommendation to pursue the construction of a downtown stadium and reuse the Candlestick site for other purposes, was that "Candlestick Park is in disrepair and within the next three to four years substantial public money will be required to restore it." The report states further that "the results of the consultant's study show that Candlestick Park is in substantial disrepair and a decision on whether to restore it cannot be deferred much longer."

Stadium Feasibility Analysis Study Findings

The Stadium Feasibility Analysis report does not identify or discuss any damage or deterioration that has occurred to the Candlestick facility. Nor does this report include any estimate of required repair costs. The Design and Engineering analysis section is intended to "represent a total program for the renovation of Candlestick Park. . . a system of 'redevelopment' which will bring this facility, as closely as possible, up to the standards of a new contemporary facility". However, the report only focuses on the need to dome Candlestick and to add enhancements to the facility, without discussing any of the work needed to correct damage or deterioration of the structure.

Giants Study Findings

The earlier Giants study also does not identify or estimate costs for repairing Candlestick Park. The Giants study, however, does state that "general deterioration of the structure has occurred and has gone unchecked." But, the description of damage, any related safety factors, or the costs to repair and restore Candlestick were not included in their report. Much of the damage at Candlestick Park is visibly apparent. The Giants' Design Team was comprised of numerous architectural and engineers who reportedly made "many visits to the site to investigate the existing conditions".

Structural and Architectural Study Findings

The Feasibility Analysis Study was conducted at approximately the same time the Department of Public Works, at the request of the Recreation and Park Department, was investigating specific key structural and architectural elements at Candlestick Park. In March, 1982, the Board of Supervisors approved an appropriation of \$1,368,000 from the Candlestick Park Fund to the Recreation and Park Department for capital facility repairs and improvements to the stadium (Ordinance No. 201-82). Appendix 4 itemizes each of the authorized improvements, the amounts appropriated, the current status of each item and the amounts expended to date. One of the items was \$200,000 for concrete patching.

Instead of the authorized concrete patching and repairs to the structure, a study of the key structural and architectural components of Candlestick Park was undertaken at a cost of \$120,000. The Department of Public Works, realized that the underside of the canopy was water stained, the roof T-beam connections were rusty and moss was visible, and there was considerable leaching of cement and spalling of the concrete. Rather than completing the authorized repairs, DPW recommended contracting for a more detailed study as the damage appeared to be more extensive than initially anticipated. A structural engineering contractor (Interactive Resources, Inc.) was selected for \$78,000, coating consultants were to inspect and analyze the concrete at a cost of \$5,400 and the Bureau of Architecture, DPW, was to conduct the architectural components analysis and

follow-up work for \$36,600. The remaining \$80,000 (\$200,000 appropriated-\$120,000 study costs) is being used by DPW for design and specifications of the construction work.

This study by Interactive Resources and DPW is described in a "Report on Deterioration of Structural and Architectural Components" at Candlestick Park, released in August, 1983. Structural and architectural improvements totalling either \$1,114,000 for short-term use over the next five years or \$5,223,000 to extend the service life indefinitely with appropriate maintenance, are recommended, as itemized in Appendix 5. An additional \$30,000 is recommended over the next five years by the Department of Public Works to conduct continuous reviews of the structure. An emergency supplemental request of \$150,000 from the Candlestick Fund to shore up the roof girder base connections temporarily was approved by the Board of Supervisors on January 30, 1984.

Analyses

Discussions with the Department of Public Works and the consultant¹ who investigated the structural engineering problems at Candlestick Park, indicate that none of the Feasibility Analysis Study Team consultants contacted them about their work to determine the extent of the structural and architectural damage to Candlestick. Mr. Don Crosby of Crosby Thornton Marshall Associates reports that these repair costs were included in their renovation cost estimates. The documentation provided by Mr. Crosby does not distinguish such repair costs from other renovation costs. Documentation of recommended safety, seismic and water damage repairs and the costs to complete such repairs should be included in the total estimation of the costs to improve and renovate Candlestick Park. If it is determined that all of these repairs are necessary, this would add an estimated \$5 million for repairs to the approximately \$54 million estimated by the Feasibility Analysis Study Team for renovation and doming for a total of approximately \$59 million. However, if Candlestick is domed, some of these repairs (e.g. Roof Canopy Membrane: \$1,176,000 and Roof over the Press Box: \$40,000) may not be necessary.

It should also be noted that the structural and architectural deterioration study was not a comprehensive evaluation of the entire Candlestick structure. This analysis concentrated on the upper portions of the stadium and in particular those elements subject to water penetration. Although DPW staff and the consultant believe that this is where most of the damage to Candlestick Park is probably located, during a site inspection of the Candlestick facility, the Budget Analyst noticed some additional spalling of concrete and leaching of cement along the pre-cast risers. This was not included in the structural and architectural components assessment study.

We believe that consideration should be given to conducting a comprehensive evaluation of the entire Candlestick facility in order to determine the total estimated costs to repair Candlestick Park. The basic criteria for including repairs and their costs should be patron and seismic safety. Such repairs should then be compared with those recommended in the current Candlestick Report on Deterioration of Structural and Architectural Components. The total costs to bring Candlestick Park up to seismic and safety standards should then be added to the estimated costs for the renovation and doming of Candlestick Park.

¹John Clinton, Interactive Resources, Inc. Interview on January 18, 1984 at Candlestick Park.

Why Such Extensive Damage?

The specific structural and architectural problems addressed in the DPW report are the result of water penetration since the time of the original construction and later expansion of Candlestick Park. The original stadium's construction began in 1958 and was completed in 1960 and the extension was added in 1970. Thus, these problems are the result of deterioration over the past 14 to 26 years.

According to the San Francisco "Consolidated Budget and Annual Appropriation Ordinance" and the Recreation and Parks Department records for each fiscal year since FY 1972-73, the budgeted and supplemental appropriation expenditures for Candlestick Park have been as follows:

	<u>Facilities Maintenance</u>	<u>Capital Improvements</u>	<u>Operating</u>	<u>Sub- Total</u>	<u>Supplemental Appropriations</u>	<u>Total</u>
1972-73	\$52,500	0	\$2,303,770	\$2,356,270	\$63,650	\$2,419,920
1973-74	190,000	0	2,399,253	2,589,253	0	2,589,253
1974-75	174,500	\$116,000	2,597,979	2,888,479	0	2,888,479
1975-76	59,400	0	2,392,063	2,451,463	0	2,451,463
1976-77	75,000	15,000	2,398,887	2,488,887	0	2,488,887
1977-78	70,000	15,000	2,469,097	2,554,097	25,000	2,579,097
1978-79	70,000	0	2,346,353	2,416,353	868,000	3,284,353
1979-80	184,000	0	2,509,921	2,693,921	448,725	3,142,646
1980-81	400,000	0	2,873,267	3,273,267	0	3,273,267
1981-82	670,000	145,000	2,987,606	3,802,606	1,368,000	5,170,606
1982-83	400,000	568,000	3,348,078	4,316,078	300,000	4,616,078
1983-84	500,000	0	3,558,565	4,058,565	150,000	4,208,565
	<u>\$2,845,400</u>	<u>\$859,000</u>	<u>\$32,184,839</u>	<u>\$35,889,239</u>	<u>\$3,223,375</u>	<u>\$39,112,614</u>

Facilities maintenance costs include:

- Specific project identified repairs to the facility (eg. parking lot improvements).
- Emergency repairs for all work performed by Recreation and Park personnel not permanently assigned to Candlestick.
- Work orders to Department of Public Works for any emergency repairs.
- Conversions of Candlestick Park configuration for football and baseball. There are four conversions each year at a cost of \$11,000 each, for a total cost of \$44,000 annually.

Capital improvements costs include:

- Additions to the physical structure.
- Major capital outlays.

Operating costs include:

- Salaries, fringes and overhead for the stationary engineers and gardeners assigned to Candlestick Park.
- Bond debt service and related charges.
- Minor capital outlays.
- Materials and supplies.
- Services from other City departments.

An itemization of the annual supplemental appropriations are as follows:

1972-73	Supplemental appropriation of \$63,650 for waterproofing and miscellaneous repairs.
1977-78	Supplemental appropriation of \$25,000 for plans and specifications for turf replacement.
1978-79	Supplemental appropriation of \$868,000 for turf replacement.
1979-80	Supplemental appropriation of \$448,725 for movable stands improvements, soil mix replacement, elevator repairs and playing surface replacement.
1981-82	Supplemental appropriation of \$1,368,000 for major renovations. Itemization and status report is contained in Appendix 4.
1982-83	Supplemental appropriation of \$300,000 for new stadium feasibility study.
1983-84	Supplemental appropriation of \$150,000 for temporary repair of roof girder base connections.

Total expenditures for Candlestick Park have ranged between \$2.41 million and \$5.17 million annually. These expenditures include the costs to retire the bonded indebtedness on Candlestick, which has averaged approximately \$2 million annually. According to the Recreation and Park Department, since fiscal year 1972-73, the bond interest and redemption payments and related costs incurred are as follows:

Bond Debt Service and Related Charges¹

1972-73	\$2,002,300
1973-74	2,052,170
1974-75	2,015,380
1975-76	2,023,872
1976-77	2,055,695
1977-78	2,104,080
1978-79	1,809,476
1979-80	1,671,629
1980-81	1,718,100
1981-82	1,749,193
1982-83	1,781,220
1983-84	1,818,100
	<u>\$22,801,215</u>

These payments are made to San Francisco Stadium, Inc., the non-profit "Corporation" created to issue and repay the revenue bonds (Series A Bonds) on Candlestick Park as pursuant to the 1977 Amended Park Lease.

Although the City pays a "Base Rental" to the Corporation of \$859,050 semi-annually (or \$1,718,000 yearly) to cover all bond interest and redemption payments and related charges, the other charges incurred by the Corporation that are associated with the bond repayment may vary annually, which results in slight fluctuations in the total bond related expenditures. As of January, 1984 the amount to retire the debt for Candlestick Park was \$18,545,000. This amount does not include any premiums for early retirement of the bonds.

If the amounts to retire the outstanding bonds on Candlestick Park are separated from the rest of the Candlestick Park budget, the annual budgeted expenditures, are reduced considerably. Approximately 60 percent or \$22,801,215 of all the budgeted and supplemental appropriations for Candlestick Park since 1972-73 have been the costs of retiring the bonds. A closer examination of the budgeted maintenance and capital improvements indicates that the facilities maintenance budget for Candlestick Park for the past 12 years has been only \$2,845,400. Seventy-five percent of this total (\$2,154,000) has been spent during the past five years. Recreation and Park staff also report that the maintenance budget for Candlestick Park during its initial ten years of operation totalled approximately \$500,000, or an average of \$50,000 per year.

Deferred maintenance to Candlestick Park since the time of its initial construction could be part of the reason that the structure is currently in need of significant repairs. The weather conditions in the Bay Area and the intensity of use that a major sports stadium must endure requires that maintenance and capital needs be immediately attended to. A preventative maintenance and periodic inspection program can prevent this situation from arising in the future. Maintenance studies have also shown that it is usually far less expensive to maintain a facility than to defer maintenance until such time that repairs become necessary and may even be of a safety or emergency nature (as is currently the case at Candlestick Park).

¹ The related charges include insurance premiums, accountant and attorney fees, audit expenses, administrative costs, bank fees, etc., incurred by the San Francisco Stadium, Inc.

CONCLUSION

The estimated costs to renovate and dome the Candlestick Park Stadium may be underestimated by as much as \$5 million in identified safety repair costs. These repair costs may have resulted, in part, from deferring maintenance expenses on Candlestick Park.

SECTION III: DOWNTOWN: SITE SELECTION ISSUES

Background

The site selection study team states in the Stadium Feasibility Analysis report that it sought to "explore all possible locations that can accommodate a stadium, particularly sites closer to downtown, and determine which one is suitable for a stadium." To this end it reports that it identified 18 possible sites near downtown, based on suggestions from the general public, organizations and elected representatives. However, four of these sites were not evaluated in detail due to "obvious major problems". The problems identified, as reported by the study team, with each of these sites are as follows:

1. 1st to 2nd Streets/Folsom to Harrison

The construction of a stadium at this location would create insurmountable costs as well as create visual problems.

2. Central Block of Yerba Buena Center (YBC)

The single block is not large enough to accommodate a stadium and because of the status of the YBC project, a stadium at this location would create seriously disruptive legal, political and social problems.

3. In the Bay

A stadium in the Bay would be extremely expensive, would have access problems and is in violation of many regulations governing the use of the Bay.

4. Kezar Stadium

Access problems would disrupt residential areas over a broad part of the City and modifications to the structure would be difficult and expensive.

The remaining 14 sites (see map, Appendix 6) were evaluated in terms of acquisition cost, access, public acceptance, technical considerations, size and fit, assembly time and policy conflict (i.e. compatibility with existing public policy regarding the site). The study team assigned a score from one to five (1 = bad, 5 = good) to each site under each of these evaluation criteria and rated the sites for feasibility based on their overall score. Additionally, the study team performed a sensitivity analysis on several of the evaluation criteria (or combination of criteria) by weighting criterion scores by a factor of two. Following are the related scores of each of the 14 sites evaluated by the study team with and without weighting of the evaluation criteria:

Downtown Site Evaluation Criteria¹

<u>Site Number and Location²</u>	<u>Unweighted Total Score</u>	<u>Total Score Weighted For:</u>					<u>Combined Total</u>
		<u>Acquisition Cost</u>	<u>Acquisition Cost/ Assembly Time</u>	<u>Public Acceptance</u>	<u>Public Acceptance/ Policy Conflict</u>	<u>Access</u>	
1 - Falstaff Brewery (10th & Harrison).	13	18	20	14	15	14	81
2 - Seal's Stadium (16th to Alameda/ Potrero to Bryant).	20	24	27	22	24	21	118
3 - Franklin Square (16th to Mariposa/Potrero to Bryant).	17	21	23	18	19	18	99
4 - Showplace Square (7th to 8th/ Berry to Irwin).	19	23	26	21	22	21	132
5 - Northwest Mission Bay (7th and Townsend).	19	20	22	23.5	27.5	21.5	133.5
6 - North Central Mission Bay (5th to 6th/Berry to Townsend).	22.5	26.5	29.5	26	29	25.5	159
7 - China Basin (2nd to 3rd/King to the Bay).	21	25	28	24.5	26.5	24.5	149.5
8 - Mission Rock (3rd to Pier 50/China Basin Channel to 800 feet).	22	27	31	26	27	24	157
9 - Southeast Mission Bay (16th and 3rd).	16	20	21	19	20	17	113
10 - Southwest Mission Bay (16th to Mariposa/I-280 to 3rd).	18	23	26	20	21	19	127
11 - South of Market (6th to 8th/ Mission to Folsom).	12	12	12	12	12	17	77
12 - Moscone Center Area (3rd to 4th/Bryant to Folsom).	16	20	22	17	18	20	113
13 - Rincon Hill (Folsom to Bryant/ Spear to Beale).	21	21	23	25	18	26	134
14 - Northeast Mission Bay (3rd to 4th/Townsend to Berry).	24	28	32	28	31	28	171

¹ As identified in the Stadium Feasibility Analysis report.

² A map displaying the locations of each of these is attached as Appendix 6.

As shown above, the five highest unweighted scores were:

Site 14.....	Score 24.0
Site 6.....	Score 22.5
Site 8.....	Score 22.0
Sites 7 and 13.....	Score 21.0
Site 2.....	Score 20.0

At the direction of the Stadium Task Force, a stadium site zone encompassing Sites 5, 6, 7, and 14 was established for further study by the consultants. This directive effectively eliminated sites 8, 13 and 2 from any further analysis even though they were rated as high or higher than those in the site zone by the site selection study team.

The following discussion presents our review and evaluation of the methodology and assumptions underlying the site selection conclusions preferred by the study team and the Task Force.

Site Zone

On the direction of the Task Force, the principal consultants focused their analysis on Sites 5, 6, 7, and 14. Although Sites 8, 13, and 2 were ranked in the top five by the site selection study team, they were excluded from further analysis for the following reasons.

Site 8 - Although Site 8 was found to present the lowest acquisition cost to the City, since it is owned by the Port, this site would conflict with both the Port's and the Metropolitan Transportation Commission's (MTC) long range plans relating to the establishment of a container terminal. This site would also pose substantial access problems, and would require the "most costly" foundation system due to poor soil conditions.

Site 13 - Based on a study of area property sales performed by the Real Estate Department, the acquisition and relocation costs associated with Site 13 are expected to be prohibitive at approximately \$70 million to \$80 million. Correspondence between the Task Force and the U.S. Postal Service (partial owner of Site 13) indicates that the Federal government would not be receptive to transferring its interest in this property for less than market value which is, according to the Postal Service, \$25 million to \$30 million.

Site 2 - Site 2 is not in a central location and poses difficult access and parking problems.

Mr. Dean Macris of the Task Force points out that although Sites 8 and 13 were rated relatively high in the matrix evaluation by the site selection study team, the results of this evaluation did not adequately reflect the overwhelming problems described above. We believe, however, that the rejection of Site 8 at this stage of analysis may have been premature for the following reasons:

- The Port's long-range plan to establish a container terminal on Site 8 does not envision construction of the terminal until beyond the year 2000. Randy Rossi of the Port points out that the ultimate success of the terminal is highly dependent on the availability of railroad transportation. At present the Port has no assurance that such transportation will be available in the future in light of the Southern Pacific's nearby Mission Bay Project. Therefore, it is not apparent why the Port's long-range plans for Site 8 are far

more significant than the impending Redevelopment Agency's South Beach housing and mixed-use development plans for Site 7, which is the Task Force's favored site.

- The Stadium Feasibility Analysis report also states that Site 8 would require the most costly foundation system due to poor soil conditions. The consultants, however, did not estimate the cost of a stadium on Site 8 because it was excluded from the site zone. Therefore, it is impossible for us to conclude that the cost of a foundation system on this site would be significantly higher than on any of the sites included in the site zone.

Favored Sites

The favored stadium sites of the study team and the Task Force are Sites 14 and 7, respectively. In the study team's evaluation, Site 14 is clearly the most suitable potential downtown site of those analyzed. However, it should be noted that due to its important location within the proposed Mission Bay project, Southern Pacific has been unwilling to transfer this property to the City. Therefore, the Task Force recommends Site 7 in substitution. However, Caltrans owns a large portion of Site 7, and the State may be required to reimburse the Federal government for approximately 90 percent of the fair market value for this property if it is not used for State transportation purposes. The Task Force report does not assume any such costs are associated with Site 7.

Due to a recent bill introduced by Assembly Speaker Willie Brown, the State may enter into negotiations with the City to transfer its interest in Site 7 (valued at approximately \$11 million) to the City for stadium construction. The State purchased the parcel for approximately \$2.8 million with substantial funding from the Federal government (i.e. approximately 90 percent of the purchase price). As such, the law requires that the State refund 90 percent of the market value of the parcel if it is sold or transferred. Deputy Mayor, Jim Lazarus reports that although the current market value of the State's portion of Site 7 is approximately \$11 million, he can not speculate what price the City may be required to pay. He points out that although the bill was recently passed by the legislature and signed by the Governor, the City has not entered into any formal negotiations with the State regarding either price or possible trade for surplus City lands. The City may propose trading suitable City land to the State for highway expansion purposes (as was intended for Site 7) in lieu of or in combination with a cash purchase of Site 7. Mr. Lazarus further reports that no suitable City land has yet been located.

It should be noted that both favored sites are in direct conflict with current preliminary project studies. Site 14 is located within the boundaries of Southern Pacific's Mission Bay Project, Site 7 impacts the Redevelopment Agency's South Beach Plan and both sites impact on the State's I-280 Transfer Project. The Task Force grants that none of the site's evaluated are free from planning conflicts yet points out that those projects affecting Sites 7 and 14 are still in a preliminary stage and are subject to modification. Our discussions with the Redevelopment Agency indicate that the initial construction of the South Beach project is to begin in the Spring of 1984.

It should also be noted that Mr. Will Dawkins, Southern Pacific Mission Bay Project Coordinator reports that prior to December, 1982 (before the Task Force study was commissioned), Southern Pacific considered construction of a multipurpose stadium as one of eleven potential development plans for the Mission Bay project area. Southern Pacific rejected the plan in December 1982 because it "ranked low in terms of public and private goals." Public goals were considered to be the creation of a significant number of jobs and additional tax revenues. The stadium plan also did not present a "profitable pursuit" for Southern Pacific based on their independent studies of stadia across the country.

CONCLUSION

Based on the preceding discussion regarding the site selection aspects of a downtown stadium, we conclude that the exclusion of Site 8 may have been premature.

SECTION IV: CANDLESTICK ALTERNATIVES: TRANSPORTATION IMPACTS

Background

Transportation access, traffic and parking are frequently cited as problems for Candlestick Park. The major access routes to Candlestick Park include US 101 (connecting with I-280), Third Street and Bayshore Boulevard. When Candlestick Park was constructed, a proposed Hunters Point Expressway (Route 230) was planned to connect the Candlestick Park area with US 101 south of the County line, with I-280 to the north, and with the proposed Southern Crossing of San Francisco Bay to Alameda County. By 1970, the proposed Southern Crossing was vetoed by State voters which eventually resulted in the removal of Route 230 from eligibility for State funding, and the City's request that Route 230 be deleted from the Interstate system.

During this period, additional roadway improvements occurred in the Candlestick area. These include:

- A. Widening of US 101 from 6 to 8 lanes;
- B. Widening of the northbound Harney Way on-ramp to 2 lanes;
- C. Construction of a new southbound interchange and on and off ramps at Alana Way connecting to Harney Way;
- D. Construction of an auxiliary northbound off-ramp lane at Harney Way;
- E. Widening of Harney Way between Jamestown Avenue and Alana Way from 3 to 5 lanes and widening of the access road to Harney Way;
- F. Construction of a pedestrian overpass across Harney Way at Jamestown Avenue to the overflow parking area;
- G. Construction of overhead directional signs on Harney Way and Jamestown Avenue.

Appendix 7 identifies these improvements, which were implemented between 1970 and 1975, by their corresponding letter. The overall effects of these improvements was the shifting of much of the pre-and post-game stadium traffic from local residential streets to Harney Way.

The Stadium Feasibility Analysis reports that when questioned on the existing Candlestick facility, the possible doming and revitalization of Candlestick Park, and some alternate development plans at the Candlestick site, traffic, transit and parking were the most frequently mentioned concerns of Bayview-Hunters Point and Visitacion Valley neighborhood leaders. Access to the stadium was also cited as a problem for the fans who spend time in traffic jams before as well as after games and, a problem for the teams since traffic jams discourage attendance. The limited supply of public transit and parking were also cited as problems for users.

The Stadium Feasibility Analysis' transportation consultants, (Jefferson Associates and JHK & Associates, Inc.), compiled estimates of the traffic, parking and transit impacts of selected alternatives for Candlestick Park and identified and estimated the costs of the needed transportation improvements for each of these alternatives. Due to

the limited scope and time for this study the consultant's analyses draws heavily from the City and County of San Francisco's Department of Public Works (DPW), "Report on Candlestick Park Access", completed in October, 1981. Much of the DPW study was based on surveys of football patrons conducted in 1973 and updated analyses of baseball patronage from 1968. New origin and destination patterns, mode split and traffic condition analyses were not conducted, updated, or verified by the consultants, although interviews were conducted at Candlestick Park to update the existing parking supply statistics. The consultants assume that the origin and destination patterns have not changed over this 10- to 15-year period. The Division of Traffic Engineering feels this is a reasonable assumption. However, our discussions with the 49ers indicate that some shifts have occurred, raising some question concerning the accuracy of the Stadium Feasibility Analysis' report of existing conditions at Candlestick Park.

Legislation

This earlier DPW "Report on Candlestick Park Access" resulted in the San Francisco Board of Supervisor's adoption of Resolution No. 1012-81 on December 8, 1981 in support of Long-Range Alternative VII, to improve access to and from Candlestick Park. These improvements were estimated to cost \$31.9 million. The Department of Public Works reports that this resolution, along with the DPW report, was referred to the Department of City Planning on February 2, 1982 to determine conformity with the City's Master Plan. The Planning Department reports that this work has been placed on hold because there has been no urgency to proceed.

In response to more recent neighborhood complaints concerning parking tickets, towing and the general unavailability of parking for all Candlestick Park events, the San Francisco Board of Supervisors adopted Resolution No. 318-82, establishing traffic regulations for pre and post game traffic at Candlestick Park for a trial period of four weeks commencing July 1, 1982. Conversations with Norman Bray from the Department of Public Works, indicate that these traffic regulations took the form of eliminating the tow away and no stopping restrictions in the residential areas surrounding Candlestick Park on those days that Giants baseball games attendance was less than 12,500 persons. The Giants were to assume the responsibility for alerting the Department of Public Works when attendance would fall below this level so that DPW crews could manually cover up the appropriate signs.

During the four-week trial period, these regulations were put into effect on three occasions. The Department of Public Works reports that the Giants were not totally cooperative in issuing notice of their estimated attendance levels. Corey Busch of the Giants disagrees that they were not cooperative with DPW. To date, DPW has not requested or received any feed-back from residents in the area, from stadium patrons, or from the Giants regarding the success or failure of these temporary measures.

Evaluation of Alternatives

Five of the eight land use alternatives described in the Stadium Feasibility Analysis' earlier chapter (A-2-Design and Engineering) were evaluated by the transportation consultants for their transportation impacts. These five alternatives include:

- Alternative 4: Maximize Industrial Use
- Alternative 5: Mixed Use With Renovated Stadium
- Alternative 6: New Stadium
- Alternative 7: New Stadium With Mixed Use
- Alternative 8: Renovated Stadium

No rationale for selecting these five alternatives for evaluation and for not including the first three alternatives for their transportation impacts is given. When queried on this omission, the consultants reported that these five alternatives represented the broadest range of transportation impacts.

Furthermore, some of the assumptions varied in the alternatives that were examined. For example, Alternative 4: Maximize Industrial Use, includes a "25% covered parking" item, that was not included in the initial land use description of this alternative. The second alternative, Alternative 5: Mixed Use With Renovated Stadium, assumes that the domed stadium, hotel, office and the central parking structure would have different acreage requirements for land use assumptions versus transportation assumptions. These differences are as follows:

Alternative Five: Mixed Use With Renovated Stadium

	<u>Land Use Assumptions</u> (as identified in Chapter A-2)	<u>Transportation Assumptions</u> (as identified in Chapter A-4)	<u>Difference</u>
Housing (500 D.U. @ 100 D.U./acre)	5 acres	5 acres	0
Domed Stadium	16.5 acres	17.5 acres	1.0 acres
Hotel (400 rooms) 250,000 sq. ft.			
Office 1,000,000 sq. ft.	12.7 acres	22.5 acres	(8.8 acres)
Retail 50,000 sq. ft.			
Parking 10,000 Structure	12.8 acres	0	12.8 acres
4,000 At-Grade	<u>31.0 acres</u>	<u>0</u>	<u>31.0 acres</u>
Total	78 acres	45 acres	33 acres

The total difference in acreage requirements for Alternative 5 is 33 acres, primarily a result of the different estimates of the parking space requirements.

Similarly, Alternative 7: New Stadium With Mixed Use, which combines the elements of Alternative 5 with a new 70,000 seat domed stadium at Candlestick has different assumptions than the earlier land use chapter in the report. No description of the acreage for the facilities are contained in either Alternative 6: New Stadium, or Alternative 8: Renovated Stadium. Such inconsistent definition of these alternatives by the various consultants raises questions about whether the alternatives were being evaluated correctly in each of the analyses.

Existing Conditions

Origin/Destination: The transportation consultants discuss the origin and destination patterns of stadium patrons based on the data and charts from the October 1981 Report on Candlestick Park Access. However, they inaccurately state that the "origin/destination results show that baseball games draw primarily from San Francisco compared to football games" whereas "football games tend to draw slightly more patrons from the Peninsula than baseball." In fact, this earlier report and the charts used in the Feasibility Analysis show quite clearly that the largest percent of stadium patrons for both baseball and football games are from the Peninsula. The breakdown of origins and destinations for football and baseball games as reported by the Stadium Feasibility Analysis consultants is as follows:

<u>Origin/Destination</u>	<u>Football</u>	<u>Baseball</u>
San Francisco	27%	33.8%
San Mateo/Santa Clara	47.1%	43%
Alameda/Contra Costa	18.6%	11.6%
Marin/Sonoma/North	7.3%	11.6%
Total	100%	100%

These breakdowns are based on surveys of football patrons conducted in 1973 and updated analyses of baseball patrons from 1968. More current data were not available for baseball patrons. However, our discussions with the San Francisco 49ers indicates that based on their records of 1983 season ticket purchasers, who represent 95 percent of the stadium patrons, the breakdown for football games is now estimated as follows:

	<u>Football</u>
San Francisco	23.9%
San Mateo/Santa Clara	45.7%
Alameda/Contra Costa	21.7%
Marin/Sonoma/Napa	8.7%
Total	100%*

This indicates the biggest downward shift has occurred in San Francisco's patronage with slight decreases in the South Bay's patronage and slight growth in the East Bay and North Bay counties patronage. These data are significant as it illustrates that approximately one-fourth to one-third of Candlestick's patrons are San Franciscans, and that both the 49ers and the Giants have a wide Bay Area drawing potential.

Parking: Both the 1981 DPW study and the Stadium Feasibility Analyses consultants state that for a capacity weekend football event of 61,000 people, parking demand at Candlestick Park can be as great as 16,400 vehicles. This is based on an estimated automobile and transit mode split of 84 percent and 16 percent, respectively, and an average vehicle occupancy of 3.12 persons per auto. A comparison of the existing parking supply, given this capacity football crowd, indicates that currently there are more than enough parking spaces to accommodate this demand. The updated consultant

* For comparison with the Stadium Feasibility Analysis data, these percentages have been adjusted for the Sacramento/Stockton/Modesto patronage (8 percent). The figures above actually represent 92 percent of the season ticket purchasers.

figures show an increase of 593 parking spaces (15,625 spaces reported in the 1981 DPW study vs. 16,218 spaces reported in the Feasibility Study), not including 220 bus spaces, 1000 new spaces projected for the Spring of 1984 and another 643 on-street parking spaces within one mile of the stadium, for a total of 17,861 spaces, not including bus spaces. However, one of the problems with parking at Candlestick is that many of these spaces are not marked or paved. The Recreation and Parks Department reports that 600 additional spaces will be striped this year.

Traffic: The consultants' statement on the existing traffic conditions and neighborhood impacts also uses this "worst case" capacity weekend football situation. Ten football games are played at Candlestick Park each season. Using this situation, the consultants, erroneously estimate the pre-game traffic to be worse at 16,400 automobiles while the post-game traffic is adjusted to 14,760 vehicles, assuming that ten percent of the crowd will depart early. While it is reasonable to assume that some patrons leave early or even wait until the crowd departs, the popularity of tail-gate parties has led to a significant number of vehicles, especially the larger recreational and van-type vehicles, arriving up to several hours before the beginning of the game. In fact, in the later downtown stadium analysis sections of the same report, the consultants state that "tail gate parties at Candlestick Stadium have been very popular" although this is not taken into account in the Candlestick Park analysis. Nicholas Leonoudakis, President of the ABLE Parking Company, Candlestick Park, reports that for a 1:00 p.m. football game, the parking lots open at 7:30 a.m. and the main lot is usually full by 9:30 a.m. This would indicate that the distribution of traffic during the pre-game period is spread over a longer period of time than the post-game period. This is supported by the DPW Traffic Engineering Division's traffic counts that show worse traffic conditions occur during the post-game periods.

Future Conditions

Parking: While the existing supply of spaces in the Candlestick area satisfies the current demand, only 7,213 (40 percent) of these spaces are located in the main lots. The remaining spaces are not controlled by the City and their future availability is not certain. The future supply and availability of parking at Candlestick Park depends primarily on two developments: 1- Candlestick Point State Recreation Area (SRA) and 2- the Executive Park Office Complex. The consultants reported that the Candlestick Point SRA, currently being developed along the Bay front, could result in the loss of from 3,750 to 4,850 parking spaces. Recent conversations with the California State Department of Parks and Recreation indicate that an estimated 1,435 parking spaces are proposed as part of this development, for an estimated maximum total loss of 3,415 spaces. Although there is no formal policy, the SRA spaces have been available for joint-use with stadium patrons and they report that there is little conflict with SRA users for these spaces.

The consultants also reported an additional 5,100 spaces may be created by the Executive Park Office Complex, although only 3,930 spaces would be available on a joint-use basis for stadium patrons. Further study by Robert Reeves, the previous Task Force Coordinator, indicates that the expansion of this development will eliminate 450 spaces, to be replaced by a 2,700 space parking garage for a net gain of 2,250 spaces. These spaces may be available for stadium use during non-office hours. Overall, these two projects could thus result in a net loss of 1,165 parking spaces. The parking supply would then be 16,696 which is slightly greater than the 16,400 spaces, estimated to be required for capacity weekend football games with a 61,000 attendance. An expanded capacity stadium with a 70,000 attendance is estimated to generate a parking demand of approximately 18,800 spaces, based on the same traffic and parking assumptions used by

the consultants for the existing Candlestick facility. This could result in a deficit parking supply of approximately 2,100 spaces.

The consultants go on to state that "although no development proposals are currently known, it is possible that further lands could also be lost to future development, including 1,780 spaces currently leased from the State . . . and 1,800 private spaces". Should this occur a further deficit parking situation would occur. We agree with the consultants that these developments should be monitored for future changes in parking supply, policies and availability. The City could also request that parking be provided by these new projects and that private spaces be made available for joint-use by Candlestick patrons.

In the alternatives analyses section, only Alternatives 5 and 7 (mixed use development with a renovated or a new stadium) include the provision of a multi-level parking structure containing 10,000 spaces, 4,000 at-grade parking spaces and approximately 1,000 spaces off-site. These 15,000 spaces are still less than the 16,400 spaces required for the existing stadium's capacity games or for any of the development alternatives proposed for Candlestick. None of the other alternatives included any new parking facilities although two of the alternatives are for an expanded stadium and thus result in even further shortages of parking (Optimum Case: deficit of 1,362 spaces/Worst Case: deficit 10,598 spaces). The possibility of planning and constructing a larger parking facility to accommodate the projected future demand was not considered.

Traffic: The development scenarios in Alternatives 4, 5, and 8 (no stadium or renovated stadium alternatives) are not projected to create significant additional traffic impacts on Bayshore Boulevard and Third Street, while Alternatives 6 and 7 (the new 70,000 seat capacity stadium alternatives) are projected to generate additional local traffic problems. Increased development at the Candlestick location, however, is projected to place a greater overall burden on traffic than that projected from renovations of the existing facility. This is because most of the traffic generated by these new developments would coincide with existing AM and PM peak weekday commuter traffic. Although these impacts are expected to be greater, the consultants only estimate the costs of one alternative that does not include a stadium. Thus, assuming a stadium at Candlestick along with the proposed developments, the future traffic is projected to seriously conflict with post-game stadium traffic following afternoon events. The consultants suggest that day games could be discontinued, if the traffic condition becomes intolerable. Although this is one solution, given that average weekday baseball games attract approximately 15,000 fans, for an estimated 4,650 number of automobiles, and that the estimated hourly capacity of this segment of US 101 is 14,400 vehicles in both directions, or 7,200 vehicles northbound and 7,200 vehicles southbound, it is not solely the stadiums' attendance that will cause the future traffic problems. Rather, it is this condition combined with the existing nearly peak vehicle capacity during PM commute hours on Highway 101 and the additional development proposed for this site. Additional solutions for relieving potential future traffic congestion should be examined.

Transit: The existing limited transit service to Candlestick Park also aggravates the traffic and parking situation. Improved transit access could relieve not only some of the traffic and parking problems at Candlestick Park but could also improve the neighborhood and commercial viability of the Hunters Point Bay View community. In all of the alternatives evaluated, the consultants recommend the re-routing or extension of Muni lines, to accommodate the potential increased demand that would be generated by increased development at Candlestick Park. A jointly-sponsored, Muni and City Planning study is currently underway to examine the Third Street/Bay Shore Corridor for potential

light rail extension. An alternative that may be considered is to extend Muni Metro service to Candlestick Park.

Costs

The short and long range improvements recommended by the Stadium Feasibility Analysis consultant team include all of the recommendations that were contained in the 1981 DPW study. Costs were developed for the short-range improvements for a total of \$1,104,000 and costs were updated for the long-range improvements from \$31,900,000 in the 1981 study to \$42,978,000 in this 1983 publication. In the 1981 study, these recommendations comprised the most costly alternatives for improving transportation access to Candlestick Park. These updated figures represent a significant increase of 34 percent over a two-year period. The consultants report their estimates of costs were developed from Caltrans data. The City's share of the recommended \$43 million transportation improvements is estimated to be approximately \$25 million.

In addition, the consultant team proposed long range improvements that were unique to each of their five evaluated alternatives. The transportation costs were not estimated for three Candlestick development alternatives without a stadium. The additional transportation improvements ranged in costs from approximately \$4 million (Alternative 4: Maximize Industrial Use with no stadium) to \$50 million (Alternative 7: Mixed Use Development with a New Stadium). The Task Force Report does not include the transportation improvement costs for alternative development of Candlestick Park in their projection of costs associated with the construction of a downtown stadium.

CONCLUSIONS

Based on the preceding discussion of transportation impacts at Candlestick Park, we conclude that:

- Transportation is an acknowledged major problem for Candlestick Park area residents, users, and the teams, despite some roadway improvements that were completed during the early 1970's.
- Although a 1981 Department of Public Works (DPW) study resulted in the Board of Supervisors adopting Resolution No. 1012-81, to improve access to and from Candlestick Park, no work has been completed on these recommended improvements. Furthermore, the Board of Supervisors adopted Resolution No. 318-82, establishing traffic regulations for pre and post game traffic at Candlestick Park for four weeks commencing July 1982. Regulations were put into effect on three occasions but no feed-back has been received.
- The Stadium Feasibility Analysis relies on trip origin data from surveys that are over ten to fifteen years old to reflect current travel patterns at Candlestick Park. The DPW feels this is reasonable, although more recent football ticket purchaser data indicate a downward shift in the San Francisco and Peninsula's patronage and a slight increase in the East and North Bay's patronage.
- Only five of the original eight land use alternatives are evaluated for their transportation impacts, no rationale for omitting the first three alternatives is explained and there are considerable differences in the assumptions that are used to define the alternatives, raising questions about whether the alternatives were being evaluated correctly in each of the analyses.

- The consultants state that the "origin/destination results show that baseball games draw primarily from San Francisco compared to football games", although the data indicate that approximately one-fourth to one-third of Candlestick's patrons are from San Francisco and the largest percent of stadium patrons for both baseball and football games are from the Peninsula.
- There are enough parking spaces to accommodate the estimated needs of the existing "worst case" capacity football crowd demand, although all of these spaces are not marked or paved. While a deficit parking supply is likely to occur in the future, due to the development of the Candlestick Point State Recreation Area and the Executive Park Office Complex, none of the alternatives propose the construction or addition of adequate parking facilities to meet this demand.
- The estimates of existing pre-game traffic conditions need to be adjusted to reflect the actual distribution of traffic arrivals over a longer period of time which results from football patrons' early arrival for tail-gate parties.
- Traffic and parking conditions are aggravated by the limited amount of transit service to Candlestick Park. The re-routing or extension of Muni bus or light rail service to Candlestick Park may help alleviate these problems.
- The consultants estimate that the long range transportation improvement cost for Candlestick Park have increased to \$43 million, 34 percent over the 1981 DPW estimate. The alternative scenario transportation improvement costs were estimated at \$4 million and were not included in the Task Force's projections of costs.

SECTION V: DOWNTOWN STADIUM: TRANSPORTATION IMPACTS

Background

The transportation consultants determined how parking, traffic and transit improvements would affect the existing Candlestick mode split and origin/destination assumptions for a larger downtown stadium; identified existing and potential traffic, parking and transit resources and problems; developed alternative parking, traffic and transit supply scenarios for downtown stadium events; and identified parking, traffic and transit improvements and their associated costs.

Evaluation of Alternatives

Three of the 14 site alternatives described in the earlier Stadium Feasibility Analysis chapter on Real Estate, were evaluated for their transportation impacts. These sites include:

Site 7: China Basin (2nd to 3rd/King to the Bay)

Site 14: Northeast Mission Bay (3rd to 4th/Townsend to Berry)

Site 5: Northwest Mission Bay (7th and Townsend)

No rationale for selecting these three alternative sites for evaluation and for not including the remaining eleven sites is mentioned. It seems reasonable that the consultants would not include all 14 sites in their detailed transportation analysis, after the earlier matrix scoring of the alternative sites judged many of the initial 14 sites as being unsuitable. However, the top ranking sites overall were: Sites 14, 6, 8, 7, 13, and 2. Site 5 was not one of the top ranked sites. When queried on these sites, the consultants reported that the Stadium Task Force established a stadium site zone that included Sites 5, 6, 7, and 14 and directed the consultants to focus their further analysis on these sites. Site 5 lies on the western boundary, Site 7 is on the eastern boundary and Site 14 is situated in approximately the middle of this target zone. No detailed transportation evaluation of Site 6 was thus conducted.

Analyses

Assumptions: After identifying these three sites, the consultants then assume that "there are very few differences in the transportation implications for each of the sites" and a demonstration site (Site 14) was chosen for actual analysis purposes. Although the consultants make some adjustments in parking for Site 5, this is not an objective analyses of alternative downtown sites' transportation impacts because the initial matrix assigned a higher access ranking and the Task Force Report assigned a lower cost to the traffic, transit and pedestrian system improvements for Site 14 than Site 7 or Site 5. Site 14 thus resulted in more favorable transportation implications than would have resulted from an analyses of the other sites. Therefore, the consultants conclusions are not necessarily transferable to other downtown locations.

It is also assumed that there will be no on-site parking provided, stadium patrons will use available public and private parking facilities, and patrons will park within a one mile or 20-minute radius of the facility. A more detailed breakdown of this total parking supply, to subdivide this one-mile area into four 1/4-mile or 5-minute walk distances, was being conducted by Robert Reeves, the previous Task Force Coordinator.

The transportation and parking analysis then focused on two specific cases: (1) a maximum capacity (70,000 person) Sunday football game and (2) a maximum capacity (50,000 person week) night baseball game. The more frequently occurring average attended baseball game and its associated transportation impacts were not factored into this analysis. Corey Busch of the Giants has stated that except for opening day, there would be no weekday baseball games. It is thus assumed that no major weekday events will occur at a downtown stadium and thus no analysis of a "non-major" weekday event and its transportation impacts on downtown were conducted.

The Stadium Feasibility Analysis consultants and the Task Force did not identify the difference between a major and a non-major stadium event. In response to the Budget Analyst's request, the Traffic Engineering Division of DPW reports that an 8,000-10,000 attendance level could be accommodated at a downtown stadium without adversely impacting weekday traffic, parking or transportation, assuming that the event ended at or before 3:30 p.m. Such limitations have not been considered in any future operating revenue projections. This is important as the cost consultants are basing their revenue estimates on the ability to schedule over 200 events days (based on a 365-day calendar year) in a multi-purpose downtown stadium. The transportation impacts will vary significantly depending upon the crowd size, time of day, and the type of events that are held. Furthermore, such events as opening day of the baseball season and Monday night football games are not included in the analysis. Although such "worst case" events would only occur infrequently and are not the typical design condition, the potentially disastrous traffic, parking and transit situation that could result from such conflicts with downtown parking and PM peak commuters should have been included in the transportation analyst's scope of work.

Origin Distribution: The distribution of origins predicted for capacity football events at Candlestick, as reported by the Stadium Feasibility Analysis consultants and the Budget Analyst, in comparison to the downtown stadium's origin distribution, as reported by the Stadium Feasibility Analysis consultants, is as follows:

<u>Percent of Patrons from</u>	<u>Stadium Feasibility Analysis Candlestick Distribution*</u>	<u>Budget Analyst's Candlestick Distribution**</u>	<u>Downtown Site Distribution</u>	<u>Difference</u>
San Francisco	27%	23.9%	32%	5 to 8.1%
South Bay	47.1%	45.7%	41%	-6.1 to -4.7%
East Bay	18.6%	21.7%	20%	-1.7 to 1.4%
North Bay	7.3%	8.7%	7%	-1.7 to -.3%
Total	100%	100%	100%	

* Based on the 1981 Candlestick Park Access Report from a 1973 distribution of 89% of capacity crowds who were season ticket holders.

** Based on the San Francisco 49ers report of a 1983 distribution of season ticket purchasers (95% of capacity crowds are estimated to be season ticket holders).

The results indicate that a downtown stadium would increase San Francisco's patronage by approximately 5 to 8 percent of the total attendance. The East Bay patronage would increase or decrease between approximately one and two percent. The South Bay's patronage would decline approximately five to six percent and the North Bay's market share would decrease up to approximately two percent. Since the downtown stadium is projected to accommodate 9,000 more patrons than Candlestick,

any increased proportional projections translate into much larger actual numbers of patrons for a downtown stadium. Decreased proportions may represent small increases, decreases or no change in actual patronage. For example, San Francisco's 27 to 24 percent of Candlestick's 61,000 capacity attendance represents 16,470 to 14,640 patrons, while San Francisco's 32 percent of a downtown stadium's 70,000 capacity attendance represents 22,400. This is an increase of 5,930 to 7,760 more San Francisco attendees projected for downtown.

For baseball games, the Stadium Feasibility Analysis consultants predicted the following:

<u>Percent of Patrons from</u>	<u>Candlestick Distribution*</u>	<u>Downtown Site Distribution</u>	<u>Difference</u>
San Francisco	33.8%	38%	4.2%
South Bay	43%	36%	-7%
East Bay	11.6%	13%	1.4%
North Bay	11.6%	13%	1.4%
Total	100%	100%	

* Based on an update of a prediction made by DPW in 1968 from the Candlestick Park Access Report.

For baseball games the South Bay patronage is predicted to decline seven percent, while both the East and North Bay would increase their market shares slightly and San Francisco patronage would increase 4.2 percent.

To predict this distribution of stadium patrons origins for a downtown facility, the consultants used a model derived from the Metropolitan Transportation Commission's (MTC) social and recreational trips in the San Francisco Bay Area distribution and mode split model.¹ One key point that this model does not consider is the saturation point or market of an area. Rather, it assumes that the origin distribution of stadium patrons is determined by how accessible, in terms of the length of travel time, various locations throughout the Bay Area are to a downtown stadium coupled with the population and average household's income. A check of the model's ability to predict actual origin distributions at Candlestick Park suggests that differences of 60 to 70 percent of those predicted by an accessibility model alone may result. Given this level of accuracy, we cannot conclude that there would be a significant difference between Candlestick Park's and a downtown stadium's ability to attract San Francisco versus other Bay Area residents. Other potential stadium events such as basketball, tennis, concerts or trade shows ability to draw from the different sectors in the Bay Area were also not investigated.

Transit vs. Autos: The Stadium Feasibility Analysis consultants then assessed the percentage of patrons who would use public transit or private automobiles to attend a downtown stadium event. This analysis combined the MTC mode and destination choice model with comparisons of actual transit and auto mode splits to stadiums in other cities in the United States. The results "represent a 50 percent increase over Candlestick Park" for public transit. For San Francisco patrons the projected transit use is

¹ Cambridge Systematics, Inc., Travel Demand Development Project for Metropolitan Transportation Commission, Final Report, Volume II, June 1980.

"somewhat over twice that at Candlestick Park today" and for other area patrons the results represent all new behavior, since public transit access to Candlestick Park for these patrons is negligible. Given the low level of accuracy of the origin distribution model discussed above, this conclusion is not adequately supported.

Charter bus services were assumed to remain at the same levels as at Candlestick Park (8 percent) and were then added to the public transit share predictions. This resulted in a 27 to 32 percent total share for all charter bus and public transit modes for capacity downtown football events and a 30 percent transit component for capacity baseball games. Assuming a capacity football event, this means between 13,300 and 16,800 persons would arrive by public transit and 5,600 persons would arrive by charter bus. At Candlestick Park, the consultants report a total transit share ranging from 16 percent for weekend football games to 13 percent for weeknight baseball games. For capacity football events this represents 4,880 persons each on public transit and charter buses. Although it is likely that transit use will increase, these estimates appear to be overly optimistic. In fact, a comparison of these predictions with Oakland indicates that it exceeds the experience at the Oakland Coliseum, which has a 19 percent transit share, even with its direct BART connection.

The transit analysis also focused on two major concerns in providing transit service to a downtown stadium: 1) space for bus loading and 2) space for bus parking. Loading and storage requirements were based on the Candlestick Park operating procedure of providing curbside loading for Muni buses that are assigned to specific routes and locating charter buses and other operators' buses at a nearby off-street storage site during events. A primary on-street loading space of 1,260 gross linear feet was assumed to be required for Muni's assigned route-operations with a back-up bus reserve zone of 1,320 gross linear feet. Shuttle buses would also need 5-8 spaces of readily accessible curbside space to allow rapid loading, departure and recycling, for an estimated requirement of 300-480 gross linear feet of space. Thus, a total of approximately 3,000 gross linear feet of space would be required for bus loading and unloading. The necessary modifications and the cost to develop such space adjacent to the stadium were not included in the overall transportation improvement or stadium construction costs. Off-street parking for charter buses is assumed to require a range of from 74,240 sq. ft. (1.7 acres) for the medium attendance baseball event to 156,160 sq. ft. (3.58 acres) for a capacity football event. Site 8 near Mission Rock is being considered by the Stadium Task Force for this purpose. An alternative to off-street parking could be on-street curb parking, however, it would remove an estimated 600 patron parking spaces near the stadium.

Traffic: The consultants use a more conservative transit mode split of 23 percent for Sunday football and 24.6 percent for weeknight baseball in their traffic analysis. Using the same Candlestick average auto occupancy levels of 3.13 persons per car for football and 3.0 persons per car for baseball, this results in an estimate of 17,300 cars for Sunday capacity football events and 12,600 cars for a capacity baseball crowd. A more usual 20,000-30,000 attendance at baseball games would generate an estimated 5,000-6,000 automobiles. The traffic associated with the football levels of attendance was determined to reach at least 90 percent of the capacity on much of the existing highway network. Of particular concern are the Bay Bridge, the two southbound major freeways (US-101 and I-280), and their access and egress roads. The Task Force report assumes the higher transit mode split of 28 percent in their traffic and parking football scenario for a total worst case estimate of 16,170 cars. This report states that "consultant studies conclude that few traffic problems would occur and that traffic volumes on City streets would be at acceptable levels if the stadium is not used for major events during exiting peak traffic periods."

The Task Force also assumes that a downtown stadium can take advantage of the transportation improvements currently being planned and financed through the I-280 Transfer Program. Although this is conceivable, the I-280 Transfer Study, which began almost two years ago, has developed six basic alternatives, which are now being reviewed by the U.S. Department of Transportation as part of its draft Environmental Impact Statement. Discussions with Caltrans officials indicate that none of the current design alternatives consider the possibility of a downtown stadium, and in fact, many of the proposed alternatives conflict with the proposed stadium sites in their use of this property for freeway touchdown ramps, connectors, right-of-ways, Muni Metro extensions, and SP rail extensions. Discussions between Caltrans and the City are occurring to resolve these differences and this project is scheduled for local public hearings in the near future. Further work was also being done by Robert Reeves, the previous Task Force Coordinator, to inventory all existing freeway and street capacities for access and egress routes for a downtown stadium.

Parking: The Task Force and consultants assume that no on-site or dedicated parking will be provided with a downtown stadium. One advantage of using existing and available area parking is its dispersed nature. This distributes the vehicles more evenly into the traffic system rather than creating bottlenecks, such as occurs at the main entrance into the Candlestick parking lot. However, as the consultants state, suitable marketing of parking locations must be done in advance so that patrons are directed to available parking without penetration into the immediate stadium areas. Who would be responsible or what would be the cost of such marketing efforts is not discussed.

The consultant's inventory of parking shows that there are 22,101 off-street spaces (14,824 public and 7,277 private) within a one-mile or a 20-minute walking distance of Sites 7 and 14. Assuming joint use of private spaces can be negotiated, approximately 90 percent of this total supply (19,891 spaces) is projected to be available during weeknights and weekend nights. Roughly 73 percent or 16,134 spaces would be available at noon on Saturdays. In addition, there are approximately 6,100 on-street spaces within a 20-minute walking distance of the stadium sites. Of this, approximately 4,000-5,000 spaces would be available during weekends and weeknights for a total of approximately 25,000 spaces. This number could be reduced further if it is necessary to eliminate parking on major access streets to improve traffic flow. Future parking may also include up to 16,410 spaces at the proposed Southern Pacific Mission Bay Project site. Estimates indicate that by 1990 parking potentially accessible to stadium patrons could be increased by about 2,480 spaces, and in subsequent years an additional 7,230 spaces may become available. Thus, the consultants conclude that available supplies within a 20-minute walking area are sufficient to meet the demand of Sunday capacity football games, assuming both public and private parking lots and garages remain open and 90 percent of these total spaces are available.

Although fewer spaces would be available on Saturdays, the consultants do not consider the possibility of a capacity event occurring on Saturdays. Nor do they project any weekday stadium events need for parking, although they estimate the availability of parking at noon on weekdays is only 7 to 14 percent of the available supply. This is approximately 1,974 to 3,948 of the existing spaces. The consultants also state that it is likely that existing parking spaces will be displaced as development occurs and that the City may want to protect existing supplies by requiring replacement of parking by developers. However, no specific adjustments for displacement of existing parking is included in their analysis. Estimates of the downtown parking situation were being changed by Robert Reeves, the previous Task Force Coordinator based on his analysis of 20 computer runs. Indications are that off-street parking may be reduced by 8,000 spaces or increased by up to 15,000 spaces by development in this area.

Costs

The Stadium Feasibility Analysis report estimates the costs for transportation improvements for a downtown stadium, irrespective of the site selected, as follows:

Transportation Improvement Costs

<u>Transportation Improvements</u>	<u>Cost</u>
1- Pedestrian Overhead Crossings 3rd, 4th, and Townsend	*
2- I-280 Touchdown Ramp	I-280 Transfer Project
3- 3rd-4th Street One-way Couplet Signings, Markings and Signal	\$20,000
4- Contra-flow lanes on 3rd & 4th Signs, Markings & Signals	\$30,000
Muni Moving Trolley Wires	\$100,000
5- Stadium Signal Timing Plan	\$30,000
6- 3rd Street Pedestrian Bridge Signs, Markings & Controls	\$5,000
7- Charter Bus Storage Area	<u>\$1,320,000 to \$7,800,000**</u>
Total	\$1,505,000 to \$7,985,000

* Pedestrian improvement costs may be included in the Mission Bay and I-280 Transfer Projects.

** Depending on the level of transit use.

The consultant's cost for transportation improvements is estimated to be approximately one and a half to eight million dollars, depending on the level of transit use and related bus storage requirements. As discussed earlier, most of these costs are associated with the need to provide off-street parking in a nearby site for charter buses during stadium events. As noted, these costs do not include the necessary I-280 freeway modifications and pedestrian overhead crossings and no costs for parking are included as it is assumed that all parking for a downtown stadium will be provided by the existing and future parking supplies. These \$1.5 to \$8 million transportation improvement costs, included by the transportation consultants, were not included in the other Stadium Feasibility Analysis' consultants design, engineering and cost assumptions for the downtown stadium.

Aside from these transportation improvements identified by the Stadium Feasibility Analysis consultants, the Task Force Report includes traffic, transit and pedestrian

infrastructure improvement costs totalling \$5,600,000. These improvements are itemized as follows:

a. Traffic System		\$1,700,000
- Signalization Changes	\$100,000	
- Street Repaving	1,000,000	
- Street Curbing	500,000	
- Street Lighting	500,000	
b. Transit System		400,000
- 3rd/4th Street Shuttle	150,000	
- 2nd Street Shuttle	250,000	
c. Pedestrian System		3,500,000
- China Basin Pedestrian Bridge	3,000,000	
- Sidewalks	<u>500,000</u>	<u> </u>
Total Infrastructure Costs		\$5,600,000

Again, it is assumed that there will be no additional costs for stadium patrons' parking.

These Task Force transportation improvements do not include any of those identified by the Stadium Feasibility Analysis transportation consultants. The Task Force states that they never envisioned the purchase of a charter bus parking lot at public expense, which is the greatest transportation cost estimated by the consultants. Site 8, which is port property, is being discussed as a possible location for a charter bus parking lot. However, neither of these analyses of transportation improvements include the costs of bus loading space or the costs for increased transit operations. The transportation consultants estimate that a total of 3,000 gross linear feet would be required for Muni and shuttle bus operations. It is assumed that a significantly greater number of patrons would arrive by transit, as transit services are projected to increase. Bus loading and unloading areas would also need to be located immediately adjacent to the stadium.

Although also not included, the costs to market the availability of parking may not be a separate cost for the stadium. Recent discussions with the Task Force Chair indicate that the parking arrangements may be handled when individuals purchase their stadium event tickets. This is currently being done in Vancouver, Canada. The costs of parking administration and marketing may then be included in the total price of the event's ticket.

Based on these reports, it is difficult to determine what the total estimated costs for transportation improvements for a downtown stadium would be. The Stadium Feasibility Analysis reports costs ranging up to \$8 million, excluding pedestrian, I-280, bus loading, transit operations, and parking improvement costs, and the Task Force reports costs of \$5.6 million, excluding similar costs with little duplication in the transportation improvements that are recommended by these two reports. Subtracting these identifiable yet uncoded improvements as well as the \$8 million expense for a charter bus lot results in only \$185,000 improvements estimated by the consultants and

¹Robert Reeves, "City/Sponsor Joint Venture" (Computer Run 20). October, 1983.

\$5.6 million by the Task Force, for a total of \$5,785,000 for transportation improvement costs for a downtown stadium.

CONCLUSIONS

Based on the preceding discussion of transportation impacts at a downtown stadium, we conclude that:

- Only three of the 14 potential downtown sites were considered for their transportation impacts, and one of these sites was not a top ranking site overall. The consultants then state that "there are very few differences in the transportation implications for each of the sites" and select one analysis site. The selected site (Site 14) had higher transportation access rankings and lower transportation improvement costs, resulting in more favorable transportation impacts, than would be expected at the other downtown sites.
- The transportation impacts from an average attended baseball game were not analyzed, although this is likely to be the most frequent event to occur at a downtown stadium. The transportation impacts from any "non-major" week-day events were not analyzed, although the cost consultants base their revenue projection on the ability to use the stadium for over 200 event days each year and this is the time that the stadium's use would potentially conflict with downtown weekday users' demand for roadway, transit and parking space. The transportation impacts from a "worst case" opening day of the baseball season or Monday night football game were not analyzed, although this could cause a potentially disastrous traffic, parking and transit situation during the afternoon peak commute.
- Based on the use of a distribution model, a downtown stadium is projected to increase San Francisco's football attendance by five to eight percent (an increase of 5,930 to 7,760 people) and baseball attendance by four percent. However, this model is based solely on locational and income factors, it does not consider the saturation point of such sports events for San Francisco residents and after a check on the model's level of accuracy we cannot conclude that there would be a significant difference in a downtown stadium's ability to attract San Franciscans. The ability of other events (e.g. tennis, soccer, concerts) to draw Bay Area residents was also not investigated.
- Downtown stadium patrons use of public transit is projected to "represent a 50 percent increase over Candlestick Park," resulting in an average total use of transit by 30 percent of all attendees. These estimates appear overly optimistic. The Oakland Coliseum, even with its direct BART connection, only achieves an average of 19 percent transit patronage.
- The two major concerns in providing transit service to a downtown stadium are bus loading and bus parking space. An estimated total of 3,000 gross linear feet of space would be required for bus loading. Off-street parking for charter buses is estimated to require from 74,240 sq. ft. (1.7 acres) to 156,160 sq. ft. (3.58 acres), or approximately 600 on-street parking spaces near the stadium.

- The Task Force report states that "few traffic problems would occur and that traffic volumes on City streets would be at acceptable levels if the stadium is not used for major events during existing peak traffic periods." The consultants use a transit estimate of 23 percent for football and 25 percent for baseball, for a capacity football crowd to attract 17,300 cars and a capacity baseball crowd to attract 12,600 cars. The Task Force report assumes a higher transit share of 28 percent, for a worst case estimate of 16,170 cars. Traffic volumes for football are projected to reach at least 90 percent of much of the roadway's capacity with the worst traffic congestion occurring on the Bay Bridge.
- It is assumed that a downtown stadium can take advantage of the transportation improvements to be financed through the Caltrans I-280 Transfer Program, although none of the Caltrans alternatives consider the possibility of a downtown stadium, and in fact, many of these alternatives conflict with the proposed stadium sites in their use of this property for freeway touchdown ramps, connectors, rights-of-way and Muni Metro and Southern Pacific rail extensions.
- No on-site patron parking is planned. Instead, stadium patrons would be expected to park in existing public and private parking spaces within a one-mile or 20-minute walking distance of the stadium. Although it is acknowledged that suitable marketing of such parking locations must be done in advance, there is no mention of who would be responsible or what would be the cost of such marketing efforts.
- An estimated total of 25,000 parking spaces would be available on Sunday and weeknights within a 20-minute walking distance of Sites 7 and 14, assuming that both public and private parking facilities remain open and 90 percent of these spaces are available for use by stadium patrons. This would be sufficient to meet the estimated worst case of 17,300 cars at a capacity football game on a Sunday afternoon. Future development on the Southern Pacific Mission Bay Project site could increase this supply significantly, while other developments may result in some reductions. Projections of weekday stadium event's need for parking were not included.
- The transportation improvements recommended by the Stadium Feasibility Analysis consultants vary considerably from those recommended by the Task Force, and several necessary transportation improvements are excluded from both reports. The itemized total cost of the reported improvements range from \$185,000 to \$5,785,000. None of these costs are included in the other downtown Stadium Feasibility Analysis cost assumptions.

SECTION VI - CANDLESTICK ALTERNATIVES: FINANCING AND ECONOMIC IMPACTS

Background

The consultants were commissioned to analyze alternative methods of financing the cost of renovating and doming Candlestick Stadium; constructing a new domed stadium at Candlestick Park; constructing a new downtown domed stadium and the economic impacts of such development projects. The possibilities of either leaving Candlestick as is or of repairing and/or renovating Candlestick without a dome were not evaluated in the Stadium Feasibility Analysis report. Mr. Corey Busch of the Giants organization states that the team will not sign a lease if Candlestick is not at least domed and existing traffic and transportation problems resolved. The review of alternative financing methods was limited to those methods either used in the past by the City and other political subdivisions or recommended by investment banking firms.

In their report, the consultants briefly describe and analyze five financing alternatives. These alternatives are as follows:

- Lease Revenue Bonds
- Private Sector Ownership
- Sale - Leaseback Financing
- Community Facilities District Financing
- Tax-Allocation Bonds

The Stadium Feasibility Analysis report presents eight potential courses of action regarding the future of Candlestick Park. Four of the alternatives assume construction of a new downtown stadium with sale or lease of Candlestick Park for various mixtures of commercial development. The remaining four alternatives assume either doming Candlestick or building a new stadium at the park with or without commercial development of excess lands. The Stadium Feasibility Analysis report does not present a total project cost for any of the eight potential development schemes.

The report does, however, present detailed construction cost estimates for both the renovation and doming of Candlestick and the building of a new downtown stadium. These estimates serve as bases for projecting the size of bond issues under a number of public financing alternatives. The debt requirements under private sponsorship of either doming Candlestick or building a new stadium on that site were not presented in the Stadium Feasibility Analysis report. However, the Task Force report states that "private sponsorship would require a project sponsor who would build, own and then operate the stadium in exchange for all tax benefits and any future profits the facility might generate. This method does not appear feasible as a means of financing Candlestick improvements for the following reasons: 1) it would require a Charter Amendment pertaining to the existing facility; 2) revenue projections indicate that the improved facility would not generate a cash flow sufficient to cover operating costs and bond costs; 3) the stadium is not located in an area allowing high advertising benefits. Consequently, it is generally believed that a private sponsor could not be found to assume ownership of Candlestick Park."

The study team's analysis of the economic impact of various development strategies is primarily a review of the market and financial data presented in the San Francisco Giant's 1982 study. The analysis also includes the projected spin-off effects of a multi-

use stadium at Candlestick and the direct and indirect revenues from alternative use of a downtown site or Candlestick Park.

The following discussion presents our review and evaluation of the presentation, methodology and assumptions underlying the financial data disclosed in the Stadium Feasibility Analysis report. For purposes of clarity we will again divide this discussion into two general sections: Candlestick Park Alternatives and Downtown Stadium Alternatives.

Development Schemes and Construction Costs

Of the eight development schemes described earlier, Schemes 5 through 8 envision continued use of Candlestick Park for stadium purposes. Specifically, Schemes 5 and 8 assume renovation of the existing structure while Schemes 6 and 7 propose building a new stadium at Candlestick Park. The cost consulting firm of Williams and Burrows, Inc. estimates the cost of renovating and doming Candlestick at \$56.1 million and the cost of a new stadium at that site at between \$109.6 million and \$113.3 million (or an average of \$111.5 million). The cost of constructing a new stadium at Candlestick Park is estimated to be approximately \$9.5 million higher than constructing a new downtown stadium (i.e. \$102 million). Although the report fails to present the itemized costs of constructing a new stadium at Candlestick, the cost consultants report that the higher cost is attributed to the amount of site and foundation work required to construct the new stadium on the existing Candlestick parking lot. The report does not present the probable reduction in site preparation costs that would occur by demolishing Candlestick and building over the existing foundation. The Stadium Feasibility Analysis report states that the Giants and 49ers would object to the disruption of parking if a new stadium was built but it is silent on the subject of whether the teams would be amenable to moving from the stadium if it were renovated. Mr. Don Crosby of Crosby Thornton Marshall Associates, informs us that doming Candlestick may interrupt the Giants' schedule for 2 to 4 months. Mr. Corey Busch of the Giants indicates that the team may be willing to relocate temporarily if suitable facilities can be located and if all the problems associated with Candlestick are corrected. It is not clear to us why the consultants did not discuss the possibility of temporarily relocating the teams to other arenas while a new stadium is built on the Candlestick site.

It should be noted that the Williams and Burrows estimate for constructing a new stadium at Candlestick was not subjected to an independent variance analysis by the consulting firm of Lee Saylor, Inc. The estimated costs of renovating Candlestick and building a downtown stadium were, however, analyzed by Lee Saylor and were found to be overstated. Therefore, the estimated cost of a new stadium at Candlestick may also be overstated.

Following is our reconstruction of the May, 1983 construction cost estimates (based on our discussions with the cost consultants) associated with each of the eight development schemes described in the Stadium Feasibility Analysis report.¹

<u>Scheme Number and Description</u>	<u>Proposed Development at Candlestick</u>	<u>Stadium Construction Costs (in Millions)</u>
1 Domed Downtown Stadium	Housing - 320 units Offices - 1,257,800 sq. ft.	\$102.0*
2 Domed Downtown Stadium	Offices - 800,400 sq. ft. Light Industrial - 450,000 sq. ft.	\$102.0*
3 Domed Downtown Stadium	Housing - 3,030 units Offices - 473,700 sq. ft.	\$102.0*
4 Domed Downtown Stadium	Housing - 220 units Offices - 392,000 sq. ft. Light Industrial - 584,802 sq. ft.	\$102.0*
5 Renovate/Dome Candlestick Stadium	Housing - 500 units Offices - 1,000,000 sq. ft. Commercial - 50,000 sq. ft. Hotel - 400 rooms Parking - 14,000 cars	\$56.1
6 New Domed Stadium at Candlestick	Parking - 8,300 cars	\$109.6 - \$113.3
7 New Domed Stadium at Candlestick	Housing - 500 units Offices - 1,000,000 sq. ft. Commercial - 50,000 sq. ft. Hotel - 400 rooms Parking - 14,000 cars	\$109.6 - \$113.3
8 Renovate/Dome Candlestick Stadium	No development	\$56.1

* Located on Site 14 (see map in Appendix 5 of this report). This figure represents a composite of various design costs studied by the Task Force, the total costs of which ranged from \$101.3 million to \$106.1 million.

¹In this section, the Stadium Feasibility Analysis report's presentation of the projected total construction cost of each development scheme is misleading and inconsistent with other sections of the report. For instance, the report states that the hard construction costs associated with Schemes 7 and 8 are identical (i.e. \$56.1 million). Scheme 7 proposes construction of a new stadium whereas Scheme 8 proposes only renovation of Candlestick. Similarly, the report states that Schemes 5 and 6 would both cost from \$109.6 million to \$113.3 million. Once again, this presentation equates the cost of renovation to the cost of building a new stadium. The consultants acknowledge that the report's presentation in this section is in error.

In their analysis of the above alternatives the consultants state that developers have warned against heavy emphasis on office space construction at the Candlestick site. This is reportedly due to an overabundance of available office space in the City at present. These developers predict that the amount of office space proposed in Scheme 1 may not be absorbed by the market for 10 to 15 years. Consequently, the developers favor an emphasis on high-technology/light industrial development of the site as proposed in Schemes 2 and 4.

William McCubbin, Vice President of Grubb and Ellis Company, disagrees with the developers' prediction. From his analysis of the office space market in San Francisco he concludes that virtually no vacancy of class 'A' (i.e. financial core) office space will exist by 1987 and he adds that fluctuations in class 'A' market demand have historically reflected the general citywide office space market. He further suggests that predictions of future demand for office space beyond five years may be difficult, if not impossible, to make. While we recognize that this merely demonstrates a difference of opinion among local real estate experts, it is important to the feasibility of any development scheme since the proposed use of the Candlestick site would have a direct bearing on the value of the land to potential developers, and consequently, the amount of capital offset resulting from the sale of these lands. Although the sales prices associated with the other development schemes are not presented for comparison purposes, the consultants conclude, from discussions with developers, that Scheme 4 would be the most marketable alternative yielding the City approximately \$13.5 million¹ of one time revenue.

While Scheme 4 may in fact propose the most feasible commercial development of Candlestick lands assuming construction of a downtown stadium, the consultants have not demonstrated the infeasibility of a similar development mix (i.e. light industrial, housing and office space), in combination with a renovated or new stadium at Candlestick (see development plans for Schemes 5 through 8, above). No mention of these alternatives is made at all.

Furthermore, in light of both the consultants' projected minimum annual tax revenues resulting from five of the eight development alternatives evaluated, and the apparent disagreement among real estate experts regarding the market for office space we question the implied superiority of Scheme 4. Following is a table displaying the projected tax revenues of each of the five schemes evaluated by the consultants. Projected tax revenues associated with Schemes 6 through 8 were not presented in the Stadium Feasibility Analysis report.

<u>Scheme Number</u>	<u>Acres Proposed for Development</u>	<u>Tax Revenues (\$ Millions)</u>	<u>Ranking</u>
1	60.43	\$2.30	2
2	60.43	\$1.72	4
3	60.43	\$3.51	1
4	60.43	\$1.40	5
5	14.61	\$2.06	3

¹ Bob Reeves, former Coordinator of the Mayor's Task Force, reports that the City has received a tentative offer to purchase Candlestick since the report was published. This offer is reportedly for an amount in excess of \$40 million. Mr. Wallace Wortman of the Real Estate Department points out that this is merely an offer and, as such, is not a current appraisal.

Notice that Scheme 5, which emphasizes office space development in tandem with the renovation of Candlestick, is expected to yield tax revenues of \$2.06 million while proposing development of only 14.6 of the 60.4 net acres available. This represents tax revenues of approximately \$141,000 per developed acre as compared to the \$58,000 per acre from Scheme 3 and \$23,000 from Scheme 4.

Notice also, that while Scheme 4 (which proposes high-technology/light industrial development) is expected to yield the lowest annual tax revenue to the City, it has been favored for marketability by those developers contacted by the consultants. If, in fact, a high-tech emphasis is the only truly marketable proposal, then the table above portrays unrealistic tax revenues for Schemes 1, 3 and 5. However, based on our discussions with Mr. McCubbin, we are not convinced that a high-tech development emphasis is any more marketable than either an office or housing development emphasis.

The report presents projected bond issue sizes for both the renovation/doming of Candlestick and the construction of a new downtown stadium under three public financing methods (i.e. lease revenue bonds, sale-leaseback and Community Facilities District financing). Here again, the report excludes analysis of the new Candlestick stadium alternative. For purposes of comparison, we have estimated the bond issue sizes required for a new stadium at Candlestick using the calculated average construction cost (\$111.5 million) based on the consultant's assumption that such a facility be built in the existing parking lot and included them in the following table. The average construction cost of building a new Candlestick stadium has been adjusted for inflation, administration and financing costs in the same manner as applied to the other two alternatives. However, as noted earlier in this section, the costs of constructing a new Candlestick stadium were not subjected to an independent variance analysis and may, therefore, be inaccurate. Inaccurate base cost predictions would obviously affect the size of debt required.

	<u>Renovate/Dome Candlestick</u>	<u>New Stadium at Candlestick</u>	<u>New Downtown Stadium</u>
Lease-Revenue Bonds	\$92,400,000	\$185,769,000	\$168,000,000
Sale-Leaseback	74,000,000	148,615,000	134,000,000
Community Facilities District	66,700,000	133,427,000	121,400,000

The above bond issues do not account for the estimated costs of transportation and street improvements for alternative development in the Candlestick area or for any capital offsets except investment income. The consultants project short and long term traffic improvement costs totalling well over \$40 million. By projecting bond issue sizes based only on stadium construction costs, the consultants have substantially understated the estimated costs of all eight development alternatives analyzed.

In an attempt to display a more realistic total cost for renovating and doming Candlestick, the Mayor's Task Force presented a cost figure that included traffic and street improvements in their report to the Mayor. However, it excludes approximately \$5.2 million for safety and maintenance measures identified by DPW in its August, 1983 report. It is unclear why the cost consultants did not specifically itemize structural weaknesses in their renovation cost estimate. While we have received assurances from Mr. Don Crosby of Crosby Thornton Marshall Associates that the costs of correcting structural weaknesses is included in their renovation cost estimate, the documentation provided by Mr. Crosby does not clearly separate these costs from other renovation and doming costs.



The projected total cost of renovating and doming Candlestick stadium including traffic and transportation improvements, is \$135.3 million before offsetting investment income of \$18.7 million (or a net cost of \$116.6 million). This figure, however, is incorrect due to a number of errors in calculation. Based on City procedures for estimating the cost of capital projects, we calculate the correct figure to be \$150.2 million before investment income of \$19.6 million, or a net cost of \$130.2 million. Therefore, the Task Force has underestimated the costs of renovating and doming Candlestick by approximately \$13.6 million. This would result in a yearly debt service obligation to the city of \$13.8 million (excluding the debt service on existing Candlestick bonds). Due to the low interest rate attached to the existing bonds it would not be advantageous for the City to refund these bonds by including them in the renovation bond issue.

Neither the Stadium Feasibility Analysis report nor the Task Force report presents any provision for capital offsets (e.g. advertising and luxury suite deposits) to the cost of renovating Candlestick, aside from investment (interest) income from reinvesting bond proceeds. The Task Force reports that potential private sponsors have shown no interest in investing in Candlestick Stadium. Therefore, the Task Force concludes that capital offsets from deposits on the sale or lease of luxury suites at Candlestick would be difficult, if not impossible, to generate. Neither the consultants nor the Task Force conducted an independent survey of demand for luxury suites at a renovated Candlestick Stadium. Ken Flowers of the 49ers organization, however, reports that in 1982 he surveyed between 2,000 and 3,000 season ticket holders and found that approximately 500 respondents indicated a strong interest in leasing luxury suites at a new stadium for approximately \$35,000 per year. Ticket holders were not asked if they would lease suites at a renovated Candlestick Stadium.

Similarly, Sam Meason of Diamond Circle Properties Incorporated (a consortium of investors engaged in building and marketing luxury suites) believes that luxury suites at a renovated Candlestick would be only marginally attractive to potential investors. He adds, however, that such suites at a new Candlestick Stadium would probably be as marketable as those proposed in the downtown stadium. Neither the Task Force nor the consulting team projected capital offsets from the lease of luxury suites at a new Candlestick Stadium. Indeed, the Task Force report makes no mention of the probable cost of such a stadium at all.

The Task Force report also excludes scoreboard advertising deposits as potential capital offsets to the projected cost of renovating Candlestick due to the stadium's out-of-the-way location. The report states that "a new stadium in a more central location also improves chances for gaining more revenue from the stadium's advertising benefits." The Task Force projects scoreboard advertising deposits in the amount of \$1 million as capital offsets to the cost of building a new downtown stadium. While we find it conceivable that a downtown stadium may generate larger advertising deposits than a domed Candlestick due to its proposed greater attendance, we also believe it is likely that some advertising deposits would be generated as capital offsets to the cost of renovating Candlestick.

Economic Impacts

The consultants sought to determine the economic impact of either a domed Candlestick (with and without commercial development of surrounding lands) or a new stadium at the park. They relied primarily on the market data presented in the Giant's study and on other published and unpublished data sources relating to the Bay Area and other cities with stadiums.

The consultants conclude that if Candlestick Park is to remain in use as a stadium site, the City would reap greater economic benefits from selling or leasing excess land for commercial development than from maintaining the existing parking lot. Although we agree that commercial development would generate greater tax revenues to the City, we question some of the assumptions that underly the consultants' projections.

First, the consultants assume a 4.93 percent inflation rate in projecting direct and indirect benefits to the City. However, throughout the rest of the Stadium Feasibility Analysis report and the Task Force report an inflation factor of 7 percent is assumed (with the exception of construction costs that are expected to only increase 5.3 percent from May, 1983 to June, 1984). Although we grant that future inflation is impossible to predict with any high degree of certainty, we note that by assuming a 4.93 percent inflation rate, the total project cost of renovating Candlestick (as recomputed by us earlier in this section) would be reduced by \$527,000.

Secondly, the consultants assume office development of the City's unused downtown stadium site if a new or renovated stadium is constructed at Candlestick. We question this assumption because, at present, the City does not own a downtown site nor would it have cause to assemble a site unless a decision had been made to construct a downtown stadium. Furthermore, we find that this assumption contradicts earlier conclusions made by the consultants in that it proposes office development against the advice of developers.

Thirdly, the consultants assume that purchases of goods and services made by Candlestick stadium patrons will be only 40 percent of those purchases by downtown stadium patrons, since most patrons of Candlestick are not forced to travel through downtown commercial areas to attend stadium events. While it is conceivable that peninsula patrons of a downtown stadium will spend more money as a result of the central location, we are not convinced that patrons will spend 150 percent more, based on our concerns with the attendance assumptions (discussed in Section VII).

CONCLUSIONS

Based on the preceding discussion of the financial aspects of either doming Candlestick or building a new stadium at the site, we conclude the following:

- The Stadium Feasibility Analysis report does not present complete analysis of all four of the identified alternatives relating to either doming Candlestick or building a new stadium on the site.
- The report does not present the potential reduction in costs associated with the demolition of Candlestick and construction of a new stadium over the existing foundation.
- The report does not present the itemized costs of building a new stadium at Candlestick or the total project costs of this alternative.
- There is some disagreement among real estate experts as to how to develop Candlestick lands.
- The tentative offer for Candlestick Park (reportedly \$40 million) is substantially higher than that amount estimated by the consultants (i.e. \$13.5 million).

- The Stadium Feasibility Analysis report's presentation of the construction costs associated with the Candlestick stadium alternatives is misleading and the Task Force report's presentation of renovation project costs display errors in calculation.
- In estimating bond issue sizes for both the renovation of Candlestick and the construction of a downtown stadium, the reports exclude some pertinent costs and potential capital offsets.
- Economic impact analyses are based on some assumptions that are either inconsistent with the rest of the report or otherwise questionable.

SECTION VII - DOWNTOWN STADIUM: FINANCING AND ECONOMIC IMPACTS

Development Schemes and Construction Costs

As indicated in Section VI, the Stadium Feasibility Analysis report does not present a total project cost for any of the four development schemes evaluated relating to the construction of a downtown stadium. They do, however, present a composite construction cost estimate of \$102,000,000 associated with a downtown stadium (Schemes 1 through 4) for purposes of projecting bond issue sizes and showing the effects of financing costs under various public financing methods.

The Task Force report, on the other hand, attempts to present a more realistic overall project cost for constructing a downtown stadium which includes site infrastructure improvements, a convertible roof, a scoreboard¹ and capital offsets. The total project costs of a downtown stadium on Site 7, as estimated by the Task Force, assuming the issuance of lease revenue bonds with and without limited private sponsorship are shown below. Note that the total project costs, as estimated by the Task Force, without private sponsorship and before capital offsets, is \$227.4 million or \$92.1 million more than the project cost of renovating/doming Candlestick (i.e., \$135.3 million).

	<u>Without Private Sponsorship</u>	<u>With Private Sponsorship</u>
Land Costs:		
Relocation	\$5,000,000	\$5,000,000
Demolition	840,000	840,000
Utilities, Fees & Services	<u>620,000</u>	<u>620,000</u>
Subtotal	\$6,460,000	\$6,460,000
Construction Costs:		
May 1983 hard costs	\$97,018,750	\$97,018,750
Convertible roof	2,500,000	2,500,000
Scoreboard	3,500,000	3,500,000
Inflation*	12,619,797	5,408,484
Contingency*	8,094,698	7,589,906
General Conditions (including administration)*	<u>7,114,662</u>	<u>6,670,986</u>
Subtotal	\$130,847,907	\$122,688,126

¹ The consultants assumed that stadium tenants would pay for the score board. Therefore, its cost was excluded from their construction estimate. Furthermore, the cost of the convertible roof was also excluded.

*To demonstrate the impact of using different methods of calculating construction contingency, inflation, general conditions and fees on financing costs and ultimately, on total project costs, we have recomputed the above using standard City procedures for estimating capital project costs (See Appendix 8). We find that by using these procedures, the total construction costs shown above (including fees) would be reduced by approximately \$1,042,538. Note that this is also the basis we used for recomputing Candlestick renovation cost estimates in Section VI on this report.

	<u>Without Private Sponsorship</u>	<u>With Private Sponsorship</u>
Fees:		
EIR	\$ 327,120	\$ 306,720
Design & Engineering*	7,850,874	7,361,288
Administration (during design)*	<u>3,925,437</u>	<u>3,680,644</u>
Subtotal	\$12,103,431	\$11,348,652
Infrastructure:		
Traffic System	\$1,700,000	\$1,700,000
Parking	-0-	-0-
Transit System	400,000	400,000
Pedestrian System	<u>3,500,000</u>	<u>3,500,000</u>
Subtotal	\$5,600,000	\$5,600,000
Financing:		
Funded Interest	\$48,687,861	\$ -0-
Bond Reserve Fund	18,108,468	10,871,421
Discount/Insurance	5,125,038	-0-
Issuance Expense	<u>427,087</u>	<u>1,030,000</u>
Subtotal	\$ 72,348,454	\$ 11,901,421
Total Project Costs	\$227,359,792	\$157,998,199
Capital Offsets:		
Investment Income	\$25,625,190	-0-
Sponsor's Equity	-0-	\$24,537,625
Deposits:		
Luxury Suites	12,600,000	\$12,600,000
Loge Seats	17,300,000	17,300,000
Scoreboard Lease	<u>1,000,000</u>	<u>1,000,000</u>
Subtotal	\$56,525,190	\$55,437,625
Total Debt	<u>\$170,834,602</u>	<u>\$102,560,574</u>

The above costs assume construction of a domed stadium on Site 7. As such, the hard construction costs are 7.5 percent higher than those associated with Site 14, the site favored by the consultants. The consultants estimated a 5 percent construction cost differential between the two sites whereas DPW estimates that the differential could be as high as 10 percent.

Lease revenue bond financing, as assumed above, currently presents the most achievable, yet most expensive, method of financing any stadium project. It must be noted, however, that bills have been introduced at both the State and Federal levels that may, if adopted, dramatically affect the feasibility of lease revenue bond financing for any stadium project. Both of these bills seek to limit the issuance of Industrial Development Bonds (IDB's). Inasmuch as lease revenue bonds used to construct a stadium are construed as IDB's by the Treasury Department, they too would be affected by the pending legislation. The Federal bill introduced by Congressman Rostenkowski (HR-4170)

would limit IDB's to \$150 per capita per state and prohibit the use of such bonds to finance the construction of luxury suites. The State bill would limit all IDB issues within California to a total of \$150 million.

Notice that the Task Force projects that with limited private sponsorship, the total debt of the project could be reduced by approximately \$68.3 million to \$102.5 million. This is due primarily to increased capital offsets from private contributions which result in lower construction and financing costs. With regard to private sponsorship, the Task Force report states that a "... project sponsor would be required to own and operate the Stadium in order to qualify for tax benefits. The City would issue lease revenue bonds for the project in a similar manner as if the City were the sponsor, but the owner would be primarily responsible for payment of bond debt service. It may even be possible to arrange the transaction so that the owner would not only contribute equity toward the project but would also be exclusively responsible for debt service and the City would have no liability for the bonds. It is also possible that the private sponsor could arrange for its own financing for the project, relieving the City entirely from the debt obligation generated by the Stadium."

As shown above, the Task Force expects the cost of relocating businesses situated in Site 7 to be approximately \$5 million. This represents a combined cost of relocating both Port and Caltrans property. These estimates were provided by the Real Estate Department and Central Relocation Services of the Redevelopment Agency. Mr. Wallace Wortman of the Real Estate Department reports that Port relocation costs are preliminary estimates made without directly contacting Port tenants. He points out that it would be contrary to City policy to contact tenants at this early stage. Actual relocation costs may be more or less than anticipated.

Aside from the traffic and transportation improvements included in the infrastructure costs, the Task Force cost itemization omits an additional \$185,000 of traffic and transportation costs identified by the consultants for Site 14 (which would also be applicable to Site 7). Furthermore, traffic and transportation improvement costs associated with the development of the Candlestick Park site have been excluded. The Task Force did not specifically address the possible traffic impact of commercial development on the area surrounding Candlestick Park if a downtown stadium is constructed. However, the Stadium Feasibility Analysis report states, in regard to traffic problems at Candlestick, that the "City of San Francisco should consider no further improvements or expansions to the Candlestick site without providing...improvements to the surface streets, access arteries, interchanges and freeway systems." In fact, with a new downtown stadium the consultants estimate the transportation improvements for alternative development at Candlestick Park will cost approximately \$4 million, assuming the stadium is demolished and the park is developed as prescribed in development Scheme 4 (see page 36 of this report).

Task Force projections also do not account for possible capital offsets from the sale of Candlestick Park since the \$40 million offer had not been tendered before the report was completed. Mr. Robert Kenealey of the City Attorney's Office informs us that part of the proceeds from such a sale of Candlestick could be placed in trust to fund debt service on existing Candlestick bonds. We presume the remainder could then be applied to the cost of Candlestick infrastructure and traffic improvements.

Based on the survey of season ticketholders conducted by the 49ers organization, the Task Force estimates that capital offsets from deposits on luxury suites and loge seats in the amount of \$29.9 million can be generated. Although the Task Force presumes application of all such deposits as an offset against the cost of construction,

this may not be the case because Ken Flowers of the San Francisco 49ers has informed us that as tenants of the stadium, they would expect to receive a portion of the proceeds from suite or seat leases. As of yet, the City has not contacted the 49ers regarding this matter. Corey Busch of the Giants reports that the City has been in contact with the Giants regarding luxury suite deposits but the matter has not been resolved. Mr. Busch suggests that the City negotiate general economic terms with both sports franchises.

Income from Operations

Inasmuch as it was outside the scope of their analysis, the consultants did not attempt to project income from operations of a new stadium. The Task Force, however, has estimated that a new multi-purpose, publicly financed stadium will become self supporting in its fifteenth year of operation. Although we recognize that such projections are, at best, merely estimates, we question the validity of some of the assumptions that lead to these results. For example:

- The Task Force has projected stadium lease revenue in the amount of \$4.21 million in the third² year of operations. This figure represents 10 percent of gross ticket sales and assumes that the Golden State Warriors will be a major tenant of the stadium. The Warriors organization has informed us that, as of yet, no commitment has been made in this regard. Furthermore, if the Warriors are to agree to play at the new stadium, the City would need to provide the team with an interim playing arena until the new stadium is constructed. The Warrior's lease with the Oakland Coliseum expires in 1985-86. A Warriors spokesman reports that the City has not yet located a suitable interim facility. Although the Civic Auditorium has been discussed as a possible site, it appears that this auditorium is incapable of providing the Warriors with sufficient seats and may be unable to accommodate the Warrior's schedule. It is interesting to note that the operations projections assume that all major sports tenants will sign 20-year leases with the stadium. The Warriors organization, however, has expressed a reluctance to enter into any lease agreement for more than 5 to 10 years.
- Projected attendance levels for the various sporting and consumer events expected to be held at a new stadium seem to present a "best-case" scenario. Following is a comparison of the projected normal attendance levels presented in both the Task Force and Giants' reports. The Giants' projections are based on case study analysis of other multi-purpose stadiums throughout the country. According to Mr. Bob Reeves, former Task Force Coordinator, Task Force projections are refinements of the Giants' projections. However, Reeves was unable to state the basis for these refinements. Mr. Corey Busch of the Giants informs us that attendance projections presented in the Giants' report were conservative estimates, especially with regard to concert attendance. Concert attendance figures were based on firm contacts with local promoters.

¹ None of these revenue projections have been agreed to by any of the sports franchises at this time.

² The third year of operations is typically the first "normal" operating year for a new stadium. The Giants study, Future of Candlestick Park, shows that new stadiums generally experience above-normal attendance levels in the first two years of operations.

Projected "Normal" Attendance

<u>Event/Use</u>	<u>Task Force</u>	<u>Giants</u>	<u>Difference</u>
Baseball	1,786,993	1,650,000	136,993
Football	589,693	550,800	38,893
Basketball	434,731	451,000	(16,269)
Tennis	49,280	42,350	6,930
Concerts	229,506	70,000	159,506
Motor Sports/Thrill Shows	168,600	159,600	9,000
Total	3,258,803	2,923,750	335,053
Consumer/Trade Shows	530,160	N/A*	N/A

As shown above, the Task Force projects a substantially higher overall attendance level than the Giants' consultants (excluding consumer/trade show attendance and the possibility that the Warriors may not be tenants). Inasmuch as attendance projections affect lease, concession, sales and admission tax revenue estimates, this higher attendance level results in increases in estimated revenue of approximately \$936,000 in the first year of normal operations (i.e. 1990-91) using the Task Force's projected average ticket prices and concession sales. Due to lack of documentation presented by the Task Force and the analysis performed by the Giants' consultants, we believe that the Giants' report predicts more realistic levels of attendance at a downtown stadium.

- In addition to consumer/trade show lease revenues, the Task Force revenue projections also presume the rental of 50,000 square feet of exhibition space for 167 days at approximately \$.14 per day or \$1,145,000 in 1990-91. Moscone Center officials report that the Center turned away bookings for between 20 and 30 event days (requiring 50,000 square feet or less) last year. This represents between \$140,000 to \$210,000 in potential rental revenue to the proposed stadium. Although it is clear that a stadium located in close proximity to the Moscone Center would be able to accommodate the Center's overflow, the Task Force report does not demonstrate that the stadium would be able to rent exhibition space for 167 days each year.
- The Task Force assumes that guided tours of the new facility will generate \$250,000 per year. Bob Reeves, former Task Force Coordinator, reports that this projection is not made in anticipation of any specific number of tours or tour charge but rather is based on a comparison with other stadiums. Of the five stadiums examined, only the Superdome in New Orleans and the Kingdome in Seattle reported income in 1982 from guided tours (\$477,000 and \$21,000

*Although consumer/trade show attendance projected in the Giants report was based in part on discussions with officials of the Moscone Center and the Convention and Visitors Bureau and therefore incorporated local market conditions, we believe that a comparison here would be misleading. The Giants' study noted that potential may exist for attracting special events yet hesitated to estimate additional attendance. Inasmuch as Moscone Center officials report that the Center turned away bookings for between 60 and 80 event days last year, we believe that the Task Force estimate of 60 event days with daily attendance of 8,836 people is well substantiated.

respectively). Both of these stadiums are centrally located. It is the opinion of Mr. James Lazarus, Deputy Mayor, that the Superdome's reported revenue probably represents a closer approximation of revenues from guided tours at a downtown stadium due to San Francisco's healthy tourist trade. Although it is entirely conceivable that some income may be generated from tours of a centrally located stadium, we believe that the Task Force revenue estimate assumes a "best-case" scenario similar to the above attendance level projections.

- The Task Force does not include any provision for the cost of potential City support services (e.g. fire, police, expanded Muni Services, etc.) in its operating cost projections. However, as Mr. Lazarus points out, the report also excludes potential revenue offsets from other sources such as parking taxes.
- The Task Force does not include the cost of conversions in its operating projections. While the current cost of converting Candlestick stadium from a baseball to a football configuration is \$11,000 per conversion, it is entirely conceivable that such costs at a new stadium may be less. Mr. Bob Reeves, former Task Force Coordinator, states that conversion costs were excluded from operating projections since such costs could be offset by lease revenues or space rentals. Presently, neither the Giants nor the 49ers pay the costs of conversions at Candlestick. Mr. Ken Flowers of the 49ers states that the team would not consider entering into a long term lease that would require the team to reimburse the City for the costs of conversion. The City has not yet discussed this matter with either the 49ers or the Giants.

Following are the projected operating revenues and costs under both public financing (i.e., lease revenue bonds) and private sponsorship of a downtown stadium for the first year of operations as presented in the Task Force report:

	<u>Public Financing</u>		<u>Private Sponsorship</u>	
<u>Revenues:</u>				
<u>Stadium Leases:</u>				
Giants	\$1,416,000		\$1,416,000	
49'ers	1,235,000		1,235,000	
Warriors	578,000		578,000	
Other	<u>849,000</u>	\$4,078,000	<u>849,000</u>	\$4,078,000
Concessions		\$2,342,000		\$2,342,000
Annual Payments on Suites		-0-		-0-
<u>Rental Spaces:</u>				
Stadium Club	\$500,000		\$500,000	
Exhibition Hall	1,000,000		1,000,000	
Commercial Space	250,000		250,000	
Office Space	<u>250,000</u>	\$2,000,000	<u>250,000</u>	\$2,000,000
Guided Tours		\$250,000		\$250,000
Advertising		\$1,200,000		\$1,200,000
Admissions Surcharge		\$2,039,000		\$2,039,000

		<u>Public Financing</u>	<u>Private Sponsorship</u>
Taxes:			
Hotel Tax	\$2,500,000		-0-
Sales Tax	187,000		-0-
Payroll Taxes	32,000		-0-
Property Tax	<u>-0-</u>	<u>\$ 2,719,000</u>	<u>-0-</u>
Total Revenues		\$14,628,000	\$11,909,000
<u>Operating Costs:</u>			
Personnel		\$(3,500,000)	\$(3,500,000)
Professional Services		(150,000)	(150,000)
Service Contracts		(600,000)	(600,000)
Utilities		(900,000)	(900,000)
Materials/Supplies/Repairs		(600,000)	(600,000)
Fixed Costs		(250,000)	(250,000)
Communications/Transportation		(80,000)	(80,000)
Rentals		(50,000)	(50,000)
Advertising/Promotion		(100,000)	(100,000)
Land Lease		-0-	-0-
Property Taxes		-0-	-0-
Capital Reserve		-0-	-0-
Total Operating Costs		<u>\$(6,230,000)</u>	<u>\$(6,230,000)</u>
Net Income before Debt Costs		\$ 8,398,000	\$ 5,679,000
Debt Costs		<u>\$(17,566,000)</u>	<u>\$(9,544,000*)</u>
Net Income Before Depreciation		<u><u>\$(9,168,000)</u></u>	<u><u>\$(3,865,000)</u></u>

*This annual debt cost on lease revenue bonds assumes a \$40 million investment from private sponsors rather than the \$24.5 million shown earlier in this section as the sponsor's equity capital offset. The projected 20-year income stream under private sponsorship represents an approximate internal rate of return of 5.5 percent on the \$40 million investment.

Bear, Stearns Funding, Inc. recently volunteered to perform a projection of operating income from a downtown stadium assuming a master lease agreement with a private sponsor. In a report to James Lazarus dated February 3, 1984, which we received on February 10, 1984, the Bear Stearns projections show that the City would be responsible for only \$1,700,000 of the \$12 million annual debt service on lease revenue bonds issued to finance the project. The City's responsibility under the Bear Stearns model would therefore, not exceed the City's current debt service obligation on existing Candlestick bonds of \$1,781,000.

The Bear Stearns model differs from Task Force projections in that it assumes the following:

- The Warriors will not become tenants of the new stadium.
- The City will take out short-term construction notes in the approximate amount of \$51 million to be repaid from capital offsets.
- Proceeds from the sale of Candlestick in the amount of \$20 million will be used as an offset against the cost of construction. The master lessor's down payment of \$15 million and loge seat sales of \$18 million will also be used as capital offsets. The Task Force report estimated loge seat sales of \$17.3 million.
- The master lessor will make an annual lease payment of \$9.5 million from suite and loge seat lease, advertising and stadium club rental receipts.
- Normal annual revenues from miscellaneous sources, such as office and exhibition space rental, concerts and guided tours will be \$1 million. (Note: The Task Force projected \$1,750,000 of such miscellaneous revenues).
- Construction costs are inflated 5.3 percent. This assumes the project will commence in June, 1984.

As a result of the above assumptions, Bear Stearns projects a "stabilized" annual net cash flow of \$10.3 million (i.e. total operating revenues of \$17.3 million less \$7 million of operating expenses before debt service and excluding any capital reserve). These projections appear to be more conservative than the Task Force projections in that they estimate greater operating costs (excluding any provision for capital reserve) and lower miscellaneous revenues. Note, however, that the amount of the City's projected annual debt service obligation assumes that: (1) adequate capital offsets will be made available to pay off the City's short-term construction loans and (2) the City will be able to issue lease revenue bonds to finance the project. In the event capital offsets from private sources are not forthcoming the City would be solely responsible for the construction loans. Furthermore, as noted earlier, pending legislation may affect the City's ability to finance the stadium with lease revenue bonds.

Like the Task Force projection, the Bear Stearns model excludes the probable traffic and transportation improvement costs associated with developing Candlestick parklands for alternative uses. Therefore, we do not believe that the traffic and transportation costs are adequately provided for in estimating total project cost (and ultimately bond debt service requirements). Similarly, since the Bear Stearns model assumes that the project will commence in June, 1984 we do not believe that the total project cost realistically reflects the effects of inflation on base construction costs. Furthermore, inasmuch as the model does not specifically identify the costs of conversions in operating projections, we are unable to conclude that such costs have been accounted for.

Economic Impacts

The consultants conclude that the greatest economic benefits to the City would result from construction of a downtown stadium in combination with commercial development on the vacant Candlestick Park site. The consultants base this conclusion

on case studies of other recent stadium developments and assume the following development program for Candlestick.

	<u>1990</u>	<u>1992</u>	<u>Year</u> <u>1994</u>	<u>Total</u>
Gross Sq. Ft. Office	245,000	245,000	245,000	735,000
Gross Sq. Ft. Light Industrial	100,000	100,000	100,000	300,000
Dwelling Units	73	73	76	222

Our concerns with the methodology assumptions and conclusions presented by the economic consultants are as follows:

- As shown above, the proposed development of Candlestick Park would emphasize office space construction. This proposal not only conflicts with the advice of developers who recommended a high-tech development emphasis but fails to relate directly to any of the eight development schemes analyzed elsewhere in the Stadium Feasibility Analysis report. Office space construction typically results in higher property and payroll tax revenues than light industrial space due, primarily, to higher market values attached to office space and higher employment ratios per square foot. Therefore, the above development program would result in a greater economic impact than a light industrial development program.
- It is unclear to us why the consultants state that they base their projections on the above Candlestick development program when footnotes to their tables on the estimated property tax revenues state an entirely different development scheme. Also, the consultants assume a median condominium price of \$145,000 to determine property tax revenues in both economic impact sections of the report when the tax revenues presented in Section I of the Stadium Feasibility Analysis report assume a price of \$78,000 per unit.
- The economic impact consultants further assume a 4.93 percent inflation rate for purposes of estimating tax revenues even though a 7 percent inflation rate is assumed throughout the rest of the report. By applying a 4.93 percent annual inflation rate to the projected cost of constructing a stadium on Site 7, the Task Force's inflation cost estimate of \$12,619,797 would be reduced by \$2,462,148 to \$10,157,649.
- The consultants assume that a downtown stadium will generate substantially higher off-site purchases of goods and services than a stadium at Candlestick Park due to its central location and increased attendance resulting from its multi-use design. We question the validity of the consultant's assertion that the downtown stadium will generate off-site expenditures 150 percent higher than a Candlestick stadium in light of our concerns with attendance projections discussed earlier in this section.

Due to the inconsistencies noted here we are unable to reach any conclusions from the economic impact data presented.

CONCLUSIONS

Based on the preceding discussion of the financial aspects of building a new downtown stadium, we conclude the following:

- Pending Federal and State legislation may, if adopted, dramatically affect the viability of issuing lease revenue bonds to finance any stadium construction project.
- The consultants' downtown stadium construction cost estimate, presented in the Stadium Feasibility Analysis report, does not represent the total project costs of a new downtown stadium. For instance, it excludes traffic and transportation improvements, scoreboard and convertible roof costs, and some potential forms of capital offsets, yet demonstrates the effects of financing costs under a number of public financing methods.
- The Task Force construction cost estimate assumes construction on Site 7 although Site 14 is favored by the consultants. This cost estimate includes some infrastructure traffic and transportation improvements and capital offsets yet excludes both the traffic and transportation improvement costs identified by the consultants and potential traffic improvement costs resulting from commercial development of Candlestick Park.
- The Task Force cost estimate assumes that all deposits from the lease of luxury suites and loge seats will be used as capital offsets against the cost of constructing the new stadium. This matter has not been resolved with either the Giants or the 49'ers.
- The Task Force projects the operating revenues of a new multipurpose stadium based on optimistic attendance levels.
- Operating revenue projections are also based on the assumption that the Golden State Warriors will be a major long-term tenant of the stadium. At present, the Warriors have made no such commitment.
- Projected operating revenues from guided tours and the lease of exhibition space appear optimistic.
- Operating projections exclude the potential costs of City support services and possible miscellaneous revenues.
- Economic impact projections are based on some inconsistent and questionable assumptions that make the consultants' conclusions difficult, if not impossible to follow.
- Although the Bear Stearns operating projections appear more conservative than those presented by the Task Force, they assume that the City will be able to secure long-term financing for the project through the issuance of lease revenue bonds and that sufficient capital offsets will be provided to pay off the City's short-term construction loans. Furthermore, the Bear Stearns' estimated total project cost excludes traffic and transportation improvement costs associated with developing Candlestick Park (and ultimately bond debt service costs) and assumes that construction will begin in June 1984. Operating cost projections do not specifically account for conversion costs.

Appendix I

CONSULTANT STUDY TEAMS

Stadium Feasibility Analysis: A Study of Alternatives for a Stadium for the City of San Francisco, CA

Architects

- *Howard, Needles, Tammen & Bergendoff
- *Crosby Thornton Marshall Associates

Engineers

Geiger Berger Associates

Urban Planners

- *The SWA Group

Construction Consultants

- *Barton-Malow Company
- *Williams & Burrows, Inc.

Cost Consultant

- *Lee Saylor, Inc.

Economists

Economics Research Associates

Traffic/Parking/Transportation

Jefferson Associates, Inc.
JHK & Associates, Inc.

Geophysicists

Harding Lawson Associates
Geo Resource Consultants, Inc.

Public Relations

Brown and Associates

Giants: The Future of Candlestick Park

Architects

- *Howard, Needles Tammen & Bergendoff¹
- *Crosby Thornton Marshall Associates, Inc.
- R. Gary Allen

Engineers

K.K.B.N.A.
Giampaolo & Associates, Inc.
The Bickle Group

Urban Planners

- *The SWA Group

Construction Consultants

- *Williams & Burrows

Cost Consultant

- *Lee Saylor, Inc.

Graphic Designer

Primo Angeli Graphics

Legal

Howard Nemerovski, Esq.

Technical Advisors

*Barton-Malow
Owens-Corning Fiberglass Corp.

***Same consultant used on both study teams.**

¹ Howard, Needles, Tammen & Bergendoff provided the Giants with a conceptual design and cost estimate for a new stadium in San Francisco, although they were not part of the initial study team.

Appendix 2

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Appendix 3

Persons Contacted

David Ash, Aide to Gordon Swanson, Chair of Chamber of Commerce Stadium Task Force

Burch Bachtold, Regional Director, Caltrans

Norman Bray, Department of Public Works

Frank Broadhead, Deputy Director, Bay Conservation Development Commission

Corey Busch, San Francisco Giants

Frank Cannizzaro, Project Director, South Beach Redevelopment Project, Redevelopment Agency

William Chastain, Assistant Project Manager, I-280 Transfer Concept Program, Caltrans

John Clinton, Principal, Interactive Resources, Inc.

Don Crosby, Principal, Crosby Thornton Marshall Associates

Terry Comerford, Blyth Eastman Paine Webber, Inc.

Ken Dargel, San Francisco 49ers

Will Dawkins, Project Director, Mission Bay, Southern Pacific Development Company

Milton Edelin, Planning Department

David Eyres, District Engineer, Federal Highway Administration, U.S. Department of Transportation

David Feltham, Planning Department

Ken Flowers, San Francisco 49ers

Verl Hall, Department of Public Works

Wilbur Hamilton, Executive Director of Redevelopment Agency, Member of Stadium Task Force

Robert Harrison, Consultant

Robert Issacson, Project Engineer, South Beach Redevelopment Project, Redevelopment Agency

Robert Jahrling, Deputy for Planning and Programs, Caltrans

Andy Jeremi, Trust Department, Bank of America

Angela Karikas, City Attorney, Port of San Francisco

Jim Kell, JHK and Associates

Robert Kenealey, Assistant City Attorney

Ray King, Mayor's Office

Joe Laconte, Williams and Burrows, Inc., Cost Consultants

James Lazarus, Deputy Mayor, Mayor's Office

Jeffrey Lee, Director of Public Works, Member of Stadium Task Force

Nicholas Leonoudakis, President, Fineway Parking Company, Candlestick Park

P.K. Macker, Executive Vice President, Golden State Warriors

Dean Macris, Director of City Planning, Chair of Stadium Task Force

Thomas Malloy, General Manager of Recreation and Park, Member of Stadium Task Force

Sam Meason, Diamond Circle Properties

William McCubbin, Vice President, Grubb and Ellis Company

Michael McGill, Executive Director, San Francisco Planning and Urban Research Association

Carol Nelson, California State Department of Parks and Recreation

Ernie Prindle, Accounting, Recreation and Park

David Reese, Mayor's Office

Robert Reeves, Stadium Task Force Coordinator

Randy Rossi, Consultant, Port of San Francisco

Joel Sabenorio, Jefferson Associates, Inc.

Dick Salladin, Bond Counsel, Orrick Herrington and Sutcliffe

Russell Sayre, Project Manager, I-280 Transfer Concept Program, Caltrans

Scott Shoaf, Department of Public Works

Tom Stimac, Harding Lawson Associates

Peter Strauss, San Francisco Municipal Railway

Wallace Wortman, Director of Property, Member of Stadium Task Force

Bill Ziebron, formerly of Jefferson Associates, Inc.

Appendix 4

STATUS OF PARK AND RECREATION APPROPRIATION (Ordinance No. 201-82)

In March, 1982, the Board of Supervisors approved an appropriation of \$1,368,000 from the Candlestick Park Fund to the Recreation and Park Department (RPD) for capital facility repairs and improvements to the stadium (Ordinance No. 201-82). An itemization of the work scheduled, the amounts appropriated, the status of each item and the amounts expended to date are as follows:

<u>Item</u>	<u>Amount Appropriated</u>	<u>Status</u>	<u>Amount Expended</u>
Parking Lot Improvements Repaving and drainage connections to remove uneven surfaces and prevent flooding.	\$400,000	Completed	\$371,000
Sound System Improvements Improved system rented for 9 months @ \$2,000/month.	18,000	Completed	18,000
Seat Repairs Rehabilitation of stadium seating, especially lower box areas where seats are pulling away from supports.	250,000	Completed)))))	
Restroom Renovations Includes resurfacing, painting and installation of new equipment in 60 restrooms.	200,000	Minor follow-up remains))))	486,192
Police and Fire Safety Additional roll-up gates with panic hardware installed at exits.	200,000	Completed)))	
Parking Lights Rehabilitation Replacement of broken and eroded light fixtures with new lights that use less power and provide more illumination.	100,000	Almost complete	93,525
Concrete Patching Limited cleaning, repairing, water- proofing, restoration and repainting was deferred in favor of a study of Candlestick's structural condition.	200,000	Study completed @ \$120,000 Design plan and specification work underway.	147,973
Total	<hr/> \$1,368,000		<hr/> \$1,116,690

Appendix 5

ESTIMATED COST FOR REPAIRS AT CANDLESTICK I

(Effective through Summer 1984)²

<u>Item</u>	<u>Five-year</u>	<u>Extended Service³</u>
Part I: Structural		
A. Roof Panel Connections	\$ 302,000	\$1,100,000
B. Baffle Construction Joint	64,000	100,000
C. Roof Girder Base Connections	198,000	996,000
D. "A" Frame Column Base Connections	150,000	426,000
E. Precast Seat Supports, Ramps and Overhead Areas	<u>95,000</u>	<u>506,000</u>
Subtotal	\$809,000	\$3,128,000
Part II: Architectural		
F. Expansion Joints	110,000	190,000
G. Joints at Stepped Precast Beams	60,000	304,000
H. Walking Deck Waterproofing	95,000	385,000
I. Roof Canopy Membrane	-	1,176,000
J. Roof Over Press Box	<u>40,000</u>	<u>40,000</u>
Subtotal	\$ 305,000	\$2,095,000
Total	\$1,114,000	\$5,223,000⁴

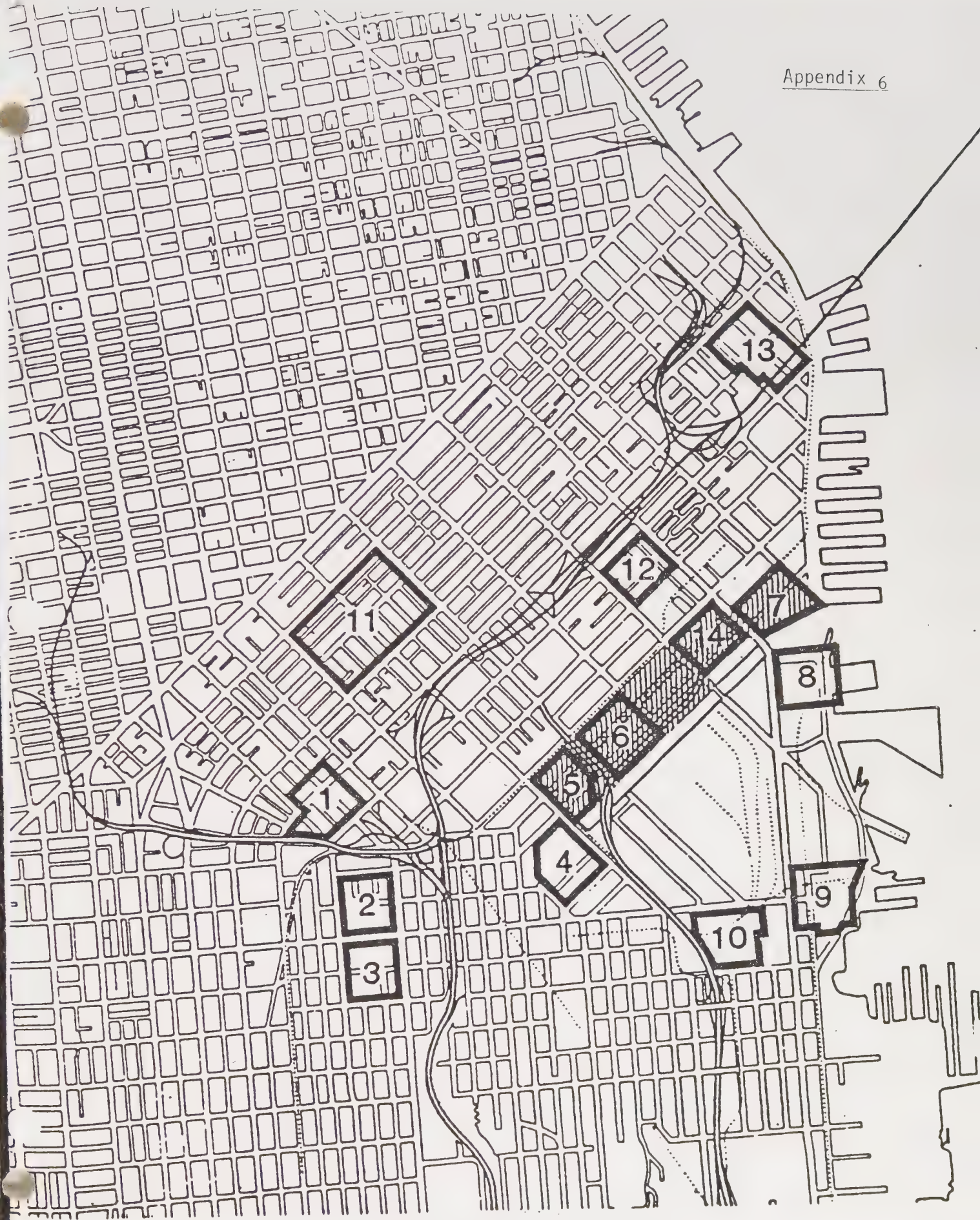
1 Includes materials, labor, contractor overhead and profit, construction contingency, and design and administration fees.

2 Cost figures should be escalated for inflation beyond the summer of 1984.

3 Includes cost of five-year program.

4 Does not include costs for ongoing normal maintenance.

Source: Department of Public Works and Interactive Resources, Inc. "Report on Deterioration of Structural and Architectural Components at Candlestick Park". August, 1983.



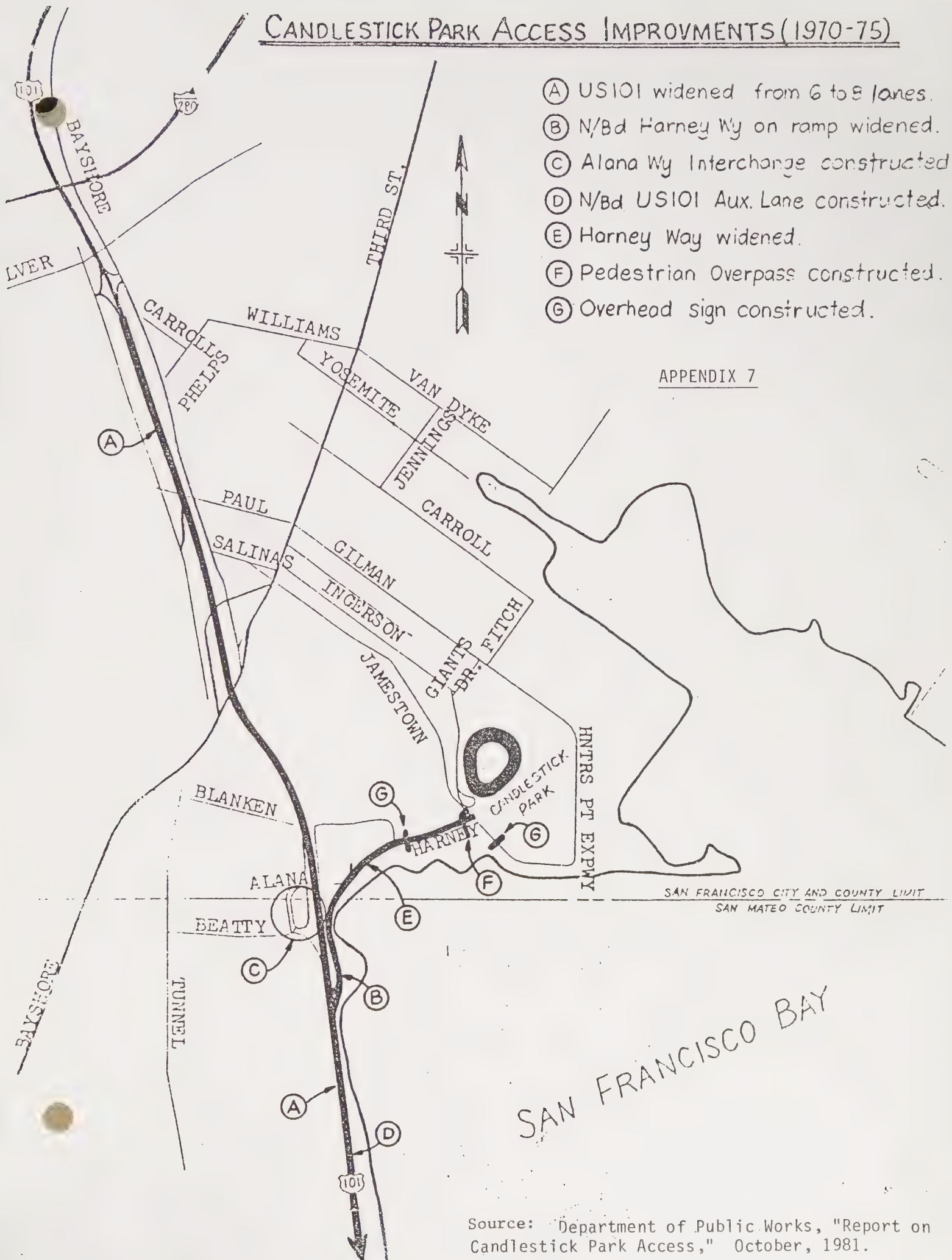
ALTERNATIVE STADIUM SITES

Source: Crosby, Thornton Marshall Associates, et.al. Stadium Feasibility Analysis: A Study of Alternatives for a Stadium for the City of San Francisco, CA. (Volume I: Research and Data). Undated, P 1-3.

CANDLESTICK PARK ACCESS IMPROVEMENTS (1970-75)

- (A) US101 widened from 6 to 8 lanes.
- (B) N/Bd Harney Wy on ramp widened.
- (C) Alana Wy Interchange constructed.
- (D) N/Bd US101 Aux. Lane constructed.
- (E) Harney Way widened.
- (F) Pedestrian Overpass constructed.
- (G) Overhead sign constructed.

APPENDIX 7



Source: Department of Public Works, "Report on Candlestick Park Access," October, 1981.

Appendix 8

DOWNTOWN STADIUM PROJECT COST - SITE 7

	<u>Task Force Estimate</u>	<u>Budget Analyst Recomputed Estimate</u>	<u>Increase (Decrease)</u>
<u>Land:</u>			
Acquisition	0	\$11,000,000	\$11,000,000
Relocation	5,000,000	5,000,000	
Demolition	840,000	840,000	
Utility Adjustments	500,000	500,000	
Fees and Services	120,000	120,000	
Subtotal	<u>6,460,000</u>	<u>\$17,460,000</u>	<u>11,000,000</u>
<u>Construction:</u>			
May 1983 Hard Costs	97,018,750	97,018,750	
Convertible Roof	2,500,000	2,500,000	
Scoreboard	3,500,000	3,500,000	
Inflation	12,619,797	16,156,351	3,536,554
Contingency	8,094,698	7,211,313	(883,385)
General Conditions	7,114,662	5,923,578	(1,191,084)
Subtotal	<u>130,847,907</u>	<u>132,309,922</u>	<u>1,462,085</u>
<u>Fees:</u>			
EIR	327,120	327,120	
Design and Engineering	7,850,874	6,181,125	(1,669,749)
Administration	3,925,437	3,090,563	(834,874)
Subtotal	<u>12,103,431</u>	<u>9,598,808</u>	<u>(2,504,623)</u>
<u>Infrastructure:</u>			
Traffic System	1,700,000	1,700,000	
Parking	0	0	
Transit System	400,000	400,000	
Pedestrian System	3,500,000	3,500,000	
Traffic Improvements	0	\$185,000	\$185,000
Subtotal	<u>\$5,600,000</u>	<u>\$ 5,785,000</u>	<u>\$185,000</u>
<u>Candiestick Infrastructure and Area Traffic Improvements</u>	0	Unknown at this time	
<u>Financing Costs:</u>			
Funded Interest	\$ 48,687,861	\$ 52,666,666	\$ 3,978,805
Bond Reserve Fund	18,108,468	19,588,304	1,479,836
Discount/Insurance	5,125,038	5,543,860	418,822
Issuance Expense	427,087	461,988	34,901
Subtotal	<u>\$ 72,348,454</u>	<u>\$ 78,260,818</u>	<u>\$ 5,912,364</u>
<u>Total Project Costs</u>	<u>\$227,359,792</u>	<u>\$243,414,618</u>	<u>\$16,054,826</u>

Appendix 8 (continued)
DOWNTOWN STADIUM PROJECT COST - SITE 7

	<u>Task Force Estimate</u>	<u>Budget Analyst Recomputed Estimate</u>	<u>Increase (Decrease)</u>
<u>Capital Offsets</u>			
Deposits - Luxury Suites	12,600,000	12,600,000	
- Loge Seats	17,300,000	17,300,000	
- Scoreboard	1,000,000	1,000,000	
Subtotal	<u>30,900,000</u>	<u>\$30,900,000</u>	
Investment Income	25,625,190	\$27,719,298	\$ 2,094,108
<u>Total Capital Offsets</u>	<u>\$ 56,525,190</u>	<u>\$58,619,298</u>	<u>\$ 2,094,108</u>
<u>Total Debt Amount</u>	<u>\$170,834,602</u>	<u>\$184,795,320</u>	<u>\$13,960,718</u>

The possible changes to the Task Force's cost estimate of constructing a stadium on Site 7 identified above would increase the total lease-revenue bond issue for this project by approximately \$14,000,000. Following are our reasons for recomputing the Task Force estimate:

- Land: - The City may be required to pay market value for the State's portion of Site 7, valued currently at \$11 million. This potential cost was not included in the Task Force estimate.
- Construction/Fees: - The Task Force method of calculating construction fees, contingencies, constructor's general conditions and inflation differs from the method normally used by the City to estimate the costs of capital projects. By using the City's capital projects method, total construction cost estimates (including fees) are only reduced by \$1,042,538 (i.e. increase in construction costs of \$1,462,085 less decrease in fee costs of \$2,504,623).
- Infrastructure: - Traffic and Transportation costs identified by the principal consultants in the Stadium Feasibility Analysis report were not included in the Task Force's estimated cost.
- Candlestick Infrastructure: - Infrastructure and traffic/transportation improvement costs associated with the commercial development of Candlestick Park were not included in the Task Force's estimated cost.
- Financing Costs: - Inasmuch as bond issue financing costs are a function of total bonded indebtedness and the changes listed above would alter the size of any bond issue, financing costs were also recomputed.
- Capital Offsets: - The 49ers and the Giants may require a portion of luxury suite and loge seat deposits. Therefore the Task Force's report may overstate capital offsets from lease deposits.

Although we have noted here and elsewhere in this report that tenants of the new stadium would expect to share lease deposits (capital offsets) with the City, no amount can be estimated at this time. Furthermore, we are unable to estimate the possible cost of infrastructure and traffic and transportation improvements at Candlestick. The transportation improvements recommended by the consultants would cost approximately \$4 million. Note that a decrease in capital offsets and an increase in traffic/infrastructure costs would increase the total debt amount listed above.

Further note that the Task Force estimated that the City could sell Candlestick in 1988-89 for a net residual value (after repaying existing Candlestick bonds and demolishing the stadium) of \$1,278,600. The Task Force proposed that this residual value be applied to the cost of installing infrastructure improvements on Candlestick lands although neither the total costs of these improvements nor this residual value were accounted for in the estimated cost of a downtown stadium.

The reported offer to purchase Candlestick for \$40 million would result in additional capital offsets in the amount of approximately \$23,510,000 (assuming no traffic improvements are required at Candlestick and after demolishing the stadium and establishing a trust fund to service existing Candlestick bonds), thereby reducing our calculated finance and total project costs by approximately \$13,700,000.

Mr. Harvey Rose
February 22, 1984
Page Two

The best approach now, it would seem, is to respond directly to any questions the Board or individual Supervisors might have -- should you decide to file the report in its current state.

Sincerely,
THE MAYOR'S TASK FORCE

Dean Macris

Dean Macris, Director
Department of City Planning

Jeffrey Lee

Jeffrey Lee, Director
Department of Public Works

Wallace Wortman

Wally Wortman, Director
Real Estate Department

Tom Malloy

Thomas Malloy, General Manager
Recreation and Park Department

Robert Kenealey

Robert Kenealey
Deputy City Attorney

U.C. BERKELEY LIBRARIES



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